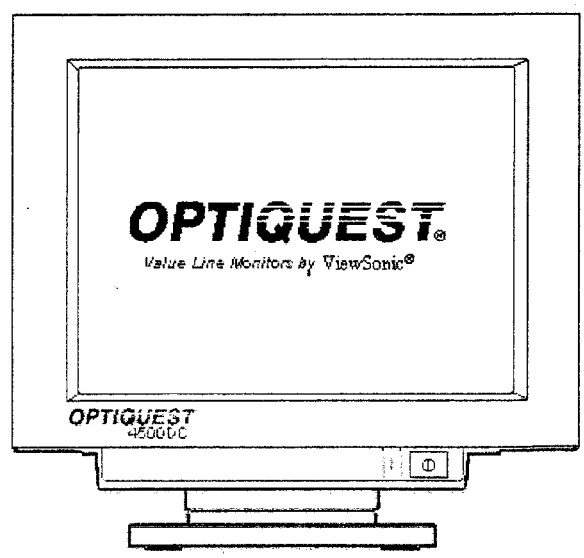
Service Manual

OPTIQUEST 4500DC

Model No. 4500DC

17" Digital Controlled Color Monitor
Value Line Series



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SAFETY NOTICE

This service manual is prepared to assist engineers or technicians of repair centers who are in charge of servicing the monitors in the field. The service manual, therefore, is not for users but for those technically oriented service engineers from repair centers who are capable of servicing the unit.

This service manual explains the monitor's outline, detailed features, functions and basic construction of the individual unit or circuit, alignment procedure and the detailed TROUBLE-SHOOTING procedures.

The contents should be read and completely understood before attempting service.

1) Make sure the power cord is disconnected before opening the BACK-COVER of the monitor and replacing any parts in the unit.

2) While the monitor is in operation, do not attempt to connect or disconnect any wire.

3) When the power is on, do not attempt to short any portion of the circuit. This shorting may cause damage to the transistors, ic's or other parts in the unit.

4) Operation of the monitor with the cabinet or the BACK-COVER removed involves a shock hazard. The repair or service work on these models should only be performed by those who are thoroughly familiar with the precautions necessary when working on high voltage equipment.

5) Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped shoule be kept away while picture tubes are handled. keep the picture tube away from the body while handling, & donot lift the picture tube by the neck.

6) When replacing a chassis in the monitor, all the protective devices must be put back in place, such as, barriers, NON-METALLIC KNOBS, adjustment and compartment shields, and isolation RESISTOR-CAPACITOR, ETC.

7) When service is required, observe the original lead dress. extra precaution should be taken to ensure correct lead dress in the high voltage circuitry area.

8) Always use the manufacturer's replacement parts. Especially critical parts as indicated on the circuit diagram should not be replaced by other manufacturer's. parts furthermore, where a short circuit has occurred, also replace those parts that indicate evidence of overheating.

9) Before returning a serviced monitor to the customer, the service technician must throughtly test the unit to be sure that it is completely safe to operate without danger of electrical shock, and must ensure that no protective device built into the monitor by the manufacturer has become defective, or inadvertently defeated during servicing. Especially, the resistance of the connection between the protective earthing terminal and the parts required to be earth shall not exceed 0.1 ohm.

4000TC SPECIFICATION

1. POWER SOURCE : AUTO RANGE

2. A/C LINE VOLTAGE RANGENS : 88ACV -132ACV
   180ACV -264ACV

3. A/C LINE FREQUENCY RANGES : 50Hz,60Hz +-3Hz

4. INRUSH CURRENT : 30A/132V OR 50A/264V(COLD START)

5. POWER CONSUMPTION : <150 WATTS> AT FULL POWER
   OUTPUT: a. 6.3V 0.4A
   b. 12V 0.15A/2.0A
   c. 27V 0.36A
   d. 77V 0.18/0.01A
   e. B+ 61V 1.1A/0.88A(24KHz)
   f. 80V 0.85A/0.67A(31KHz)
   g. 96V 0.73A/0.57A(37KHz)
   h. 102V 0.71A/0.57A(39KHz)
   i. 114V 0.59A/0.46A(48KHz)
   j. 136V 0.50A/0.40A(56KHz)
   k. 159V 0.45A/0.36A(64KHz)

6. CRT : 17 INCH
   90 DEGREE
   TRINITRON CRT PHOSPHOR STRIPE PITCH 0.25mm

7. SCAN FREQUENCE H/V :
   1. 61.08Khz / 75.78Hz
   2. 59.59Khz / 72.09Hz
   3. 56.48Khz / 70.07Hz
   4. 48.08Khz / 72.19Hz
   5. 37.86Khz / 72.809Hz
   6. 35.16Khz / 56.25Hz
   7. 31.47Khz / 59.94Hz
   8. 24.83Khz / 56.4Hz

8. VIDEO BANDWIDTH : 86MHz

9. RESOLUTION : (1) 1024x768 (2) 1024x768 (3) 1024x768
   (4) 800x600 (5) 640x480 (6) 800x600
   (7) 640x480 (8) 640x400

10. TERRESTRIAL MAGNETIC FIELD : NORTHERN HEMISPHERE H=0.01 V=0.45 GAUSS
    SOUTHERN HEMISPHERE H=0.01 V=-0.52 GAUSS

11. REGULATORY STANDARDS : MPR-II, UL, CSA, FCC-B, DOC, DHHS, FTZ, PTB, TUV GS/ERGO, SETI, NEMKO, DEMKO, SEMKO

TIMING CHART

FACTORY MODE SETTINGS						
PARAMETER	MODE					
	1	2	3	4	6	5
HORIZONTIAL TIMING						
fH SYNC KHZ	56.48	61.08	59.59	48.08	37.86	35.16
A H-TOTAL μS	17.707	16.37	16.78	20.8	26.413	28.44
B H-SYNC μS	1.813	3.72	1.62	2.40	1.27	2.00
C H-BP μS	1.920	0.65	1.954	1.28	4.06	3.56
D H-ACTIVE μS	13.653	11.91	12.91	16.00	20.317	22.22
E H-FP μS	0.320	0.09	0.236	1.12	0.762	0.66
VERTICAL TIMING						
fV SYNC HZ	70.07	75.78	72.09	72.19	72.809	56.25
O V-TOTAL mS	14.271	13.191	13.87	13.853	13.735	17.775
P V-SYNC mS	0.106	0.131	0.101	0.125	0.079	0.057
Q V-BP mS	0.513	0.491	0.807	0.478	0.740	0.626
R V-ACTIVE mS	13.598	12.57	12.977	12.48	12.678	17.064
S V-FP mS	0.053	0.0089	0.016	0.77	0.238	0.028
H/V SYNC POLARITY	- / -	+ / +	- / -	+ / +	- / -	+ / +
DISPLAY SIZE HOR. unit : mm VER.	300 225	300 225	300 225	300 225	300 225	300 225
RESOLUTION DOT LINE	1024 768	1024 768	1024 768	800 600	640 480	800 600
fPIXEL MHZ	75.00	86.00	79.32	50.00	31.5	36.00

FACTORY MODE SETTINGS					
PARAMETER	MODE				
	7	V-SIZE ADJ. ONLY			
HORIZONTIAL TIMING					
fH SYNC KHZ	31.47	24.83			
A H-TOTAL μS	31.777	40.290			
B H-SYNC μS	3.813	3.040			
C H-BP μS	1.907	4.00			
D H-ACTIVE μS	25.417	30.400			
E H-FP μS	0.635	2.850			
VERTICAL TIMING					
fV SYNC HZ	59.94	56.4			
O V-TOTAL mS	16.683	17.72			
P V-SYNC mS	0.0636	0.320			
Q V-BP mS	1.049	1.010			
R V-ACTIVE mS	15.253	16.110			
S V-FP mS	0.318	0.260			
H/V SYNC POLARITY	- / -	- / -			
DISPLAY SIZE HOR. unit : mm VER.	300 225	300 187			
RESOLUTION DOT LINE	640 480	640 400			
fPIXEL MHZ	25.18	21.053			

ALIGNMENT PROCEDURE

THIS ALIGNMENT PROCEDURE IS USED TO ADJUST/TEST THE PICTURE PERFROMMANCE IN ORDER TO OBTAIN OPTIMUM CONDITIONS THE FOLLOWING SEQUENCE MUST BE FOLLOWED.

1.WARM UP FOR 30 MINUTES BEFORE PERFORMING EVERY TEST AND ALIGMENT, CRT FACES TO EAST,ROOM BRIGHTNESS IS TO BE AT 500 LUX.
MAKE SURE THE ANALOG SIGNAL LEVEL IS AT 0.7 Vp-p AND THEN INPUT THE SIGNAL.
* THE FOLLOWING IS THE INITIAL SET-PU BEFORE THE AUTO ALIGNMENT,AND PRESET MAIN MODE IS 56.48KHz.

2.HIGH VOLTAGE SET-UP:
INPUT MAIN MODE CROSS HATCH PATTERN, ADJUST VR1 TO GET HIGH VOLTAGE EQUAL TO 26.5+ -0.3KV.

3.G1 VOLTAGE SET-UP:
INPUT MAIN MODE CORSS HATCH PATTERN,VST7 & VST8 SET-UP IS F0, EXTERNAL CONTRAST VR TURN MINIMUM, EXTERNAL BRIGHTNESS VR TURN MAXIMUM ADJUST VR305 TO GET G1 VOLTAGE EQUAL TO -95V.

4. A.B.L CIRCUIT SET-UP:
INPUT MAIN MODE, ADJUST VR304 CLOCKWISE UNTIL IT REACHES END.

5.INSIDE CONTRAST SET-UP:
INPUT MAIN MODE,ADJUST VR303 TO THE MIDDLE POSITION.

6.V-SIZE INSIDE VR SET-UP:
INPUT 24.83KHz 640 * 400 MODE W/O BOARD TIMING, ADJUST VR201 GET VERTICAL SIZE TO JUST OVER SCAN.

7.WHITE BALANCE ALIGNMENT : (INPUT MAIN MODE)
a. SET-UP THE INITIAL VALUE FROM VST1 TO VST6 :
VST1=AA(R GUN ≒ 50Vp-p), VST2=A0, VST3=90(G GUN ≒ 45Vp-p), VST4=40, VST5=40, VST6=40(B GUN ≒ 55VDC)

b.INPUT 2" SQUARE PATTERN ADJUST VST7 GET RASTER BRIGHTNESS TO 0.01FL, ADJUST VST8 GET 2" SQUARE BRIGHTNESS TO 1.5FL, READ x , y VALUE ,IF THE VALUES LESS THAN x=283 and y=298 ,THEN FIX B GUN BUT ADJUST G,R GUN;WHEN x >y > STANDARD VALUES OR x >STANDARD >y, THEN FIX R GUN BUT ADJUST B,G GUN ;WHEN y >x >STANDARD > OR y >STANDARD >x , THEN FIX G GUN BUT ADJUST R,B GUN .(NOTE THESE , VST4 TO VST6 MUST AT LEAST GREATER THAN 40 .

c.ADJUST VST7 GET RASTER BRIGHTNESS TO 0.01FL, ADJUST VST8 GET 2" SQUARE BRIGHTNESS TO 30FL, ADJUST VST1 & VST2 GET x VALUE TO 0.283 + -0.01, y VALUE TO 0.298+ -0.01 .

d.REPEAT THE ALIGNMENT ACCORDING b & c PROCEDURE, UNTIL THE PICTURE BRIGHTNESS x =0.283+ -0.01 y=0.298+ -0.01.

8.BRIGHTNESS ALIGNMENT:
a.INPUT MAIN MODE SET-UP VST7 & VST8 TO F0, EXT.CONTRAST TO MIN. EXT. BRIGHTNESS TO MAX. ADJUST G2 GET RASTER BRIGHTNESS TO 1.0+ -0.2FL.

b.INPUT 2" SQUARE PATTERN TURN EXT. CONTRAST TO MIN. TURN EXTERNAL.

BRIGHTNESS TO 0.01FL, TURN EXT.CONTRAST TO MAX. ADJUST VR303 TO 43FL;CHANGE TO FULL WHITE PATTERN ADJUST VR304 GET BRIGHTNESS TO 28FL.

9.TILT CONFIRMATION:
INPUT MAIN MODE CROSS HATCH PATTERN,
CONFIRM THAT THE TILT OF THE PICTURE IS LESS THAN 2.5mm.

10.FOCUS ALIGNMET:
a.INPUT MAIN MODE, FULL WHITE PATTERN,
TURN EXT. BRIGHTNESS VR UNTIL THE RASTER DISAPPEARS, TURN EXT. CONTRAST VR UNTIL THE BRIGHTNESS TO 25FL.

b.THEN CHANGE PATTERN TO CROSS HATCH,REPEAT ADJUST FOCUS PACK F1 & F2 UNTIL HORIZONCAL LINE & VERTICAL LINE ARE THE SHARPEST.

c.THEN CHANGE THE PATTERN TO STYLE " ⊠ ",CHECK FOCUS ARE ALL RIGHT.

11.MIS-COMVERGENCE ALIGNMET:
a.INPUT MAIN MODE FULL WHITE PATTERN,
TURN EXT. BRIGHTNESS VR UNTIL THE RASTER DISAPPARES, TURN EXT. CONTRAST VR UNTIL THE BRIGHTNESS TO 25FL.

b.CHANGE THE PATTERN TO CROSS HATCH PATTERN,ADJUST RCV (VERTICAL LINE) & VR101 (HORIZONCAL LINE) OR DY YOKE TO BE A AREA $\leqq$ 0.3mm B AREA $\leqq$ 0.4mm.

12.GEOMETRIC AND SIZE AUTO ALIGNMET:
A.MAIN MODE PERFORMANC (RASTER) ALIGNMET:
a.HORIZONCAL CENTERING ALIGNMET:
SET-UP VDY3 TO 20(ABOUT 2.5V), ALIGNMET VDY4 UNTIL RASTER TO AT BEZEL CENTER.

b.VERTICAL CENTERING (RASTER) ALIGNMET:
ALIGNMET VDY8 UNTIL RASTER TO AT BEZEL CENTER.

c.H-PHASE & V-PHASE ALIGNMET:
SET-UP VIDEO DISPLAY AT BEZEL CENTER, GET $|L-R| \leqq 3mm$ $|T-B| \leqq 3mm$.

d.H-WIDTH & V-SIZE ALIGNMET:
ALIGNMET H-WIDTH TO 300$\pm$2mm,V-SIZE TO 225$\pm$2mm.

e.GEOMETRIC ALIGNMET:
ALIGNMET VDY2(PINCUSHION) & VDY3(PIN-BALANCE),TO GET GEOMETRIC DISTORTION L & R $\leqq$ 2.0mm T & B $\leqq$ 2.5mm.

f.V-LINEARITY ALIGNMET:
ALIGNMET VDY1 WAVE, TO GET V-LINEARITY $\leqq$ 7%.
g.REPEAT THE ALIGNMET ACCORDING TO c & d PROCEDURE.

B.OTHER PRESET MODE ALIGNMET;
a.PINCUSHION ALIGNMET:
ADJUST VDY2 GAIN GET GEOMETRIC DISTORTION L & R $\leqq$ 2.0mm T & B $\leqq$ 2.5 mm.

b.H-PHASE & V-PHASE ALIGNMET:
CENTER THE VIDEO DISPLAY ON THE BEZEL,GET $|L-R|$ & $|T-B| \leqq$ 3mm.

c.H-WIDTH & V-SIZE ALIGNMET:
ADJUST H-WIDTH & V-SIZE, MODE 3.4.5 H=300mm V=225mm, MODE 2 H=300

mm V=200mm, MODE 6 H=300mm V=187mm.

C.BRIGHTNESS UNIFORMITY CONFIRMATION:
INPUT MAIN MODE, 2" SQUARE PATTERN, TURN EXT.BRIGHTNESS VR GET RASTER TO 0.01FL, TURN EXT.CONTRAST VR GET BRIGHTNESS TO 25FL, CHECK 4 CORNER BRIGHTNESS ≧ CENTER BRIGHTNESS 60%.

D.STABILITY OF THE DISPLAY SIZE CONFIRMATION:
INPUT MAIN MODE, FULL WHITE PATTERN,TURN EXT.CONTRAST VR TO GET BRIGHTNESS FROM 3FL TO 25FL, CHANGE SIZE MUST < 3mm.

E.PURITY CONFIRMATION:
INPUT MAIN MODE FULL WHITE PATTERN,
ADJUST THE EXT. BRIGHTNESS VR UNTIL THE RASTER DISAPPEARS.
ADLUST THE EXT. CONTRAST VR UNTIL THE BRIGHTNESS IS 25FL.USE VISUAL INSPECTION TO CONFIRM THE PURITY OF EACH R.G.B. AS FOLLOWS:
a.WHEN ONLY INPUTING R, MUST NOT APPEAR G.B.
b.WHEN ONLY INPUTING G, MUST NOT APPEAR R.B.
c.WHEN ONLY INPUTING B, MUST NOT APPEAR R.G.

F.VIDEO NOISE CONFIRMATION:
INPUT ALL MODE CROSS HATCH PATTERN OR FULL WHITE PATTERN,
CHECK BY VISUAL INSPECTION FROM A DISTANCE OF 19 INCHS,
WHETHER THE PICTURE HAS VIDEO NOISE OR NOT.

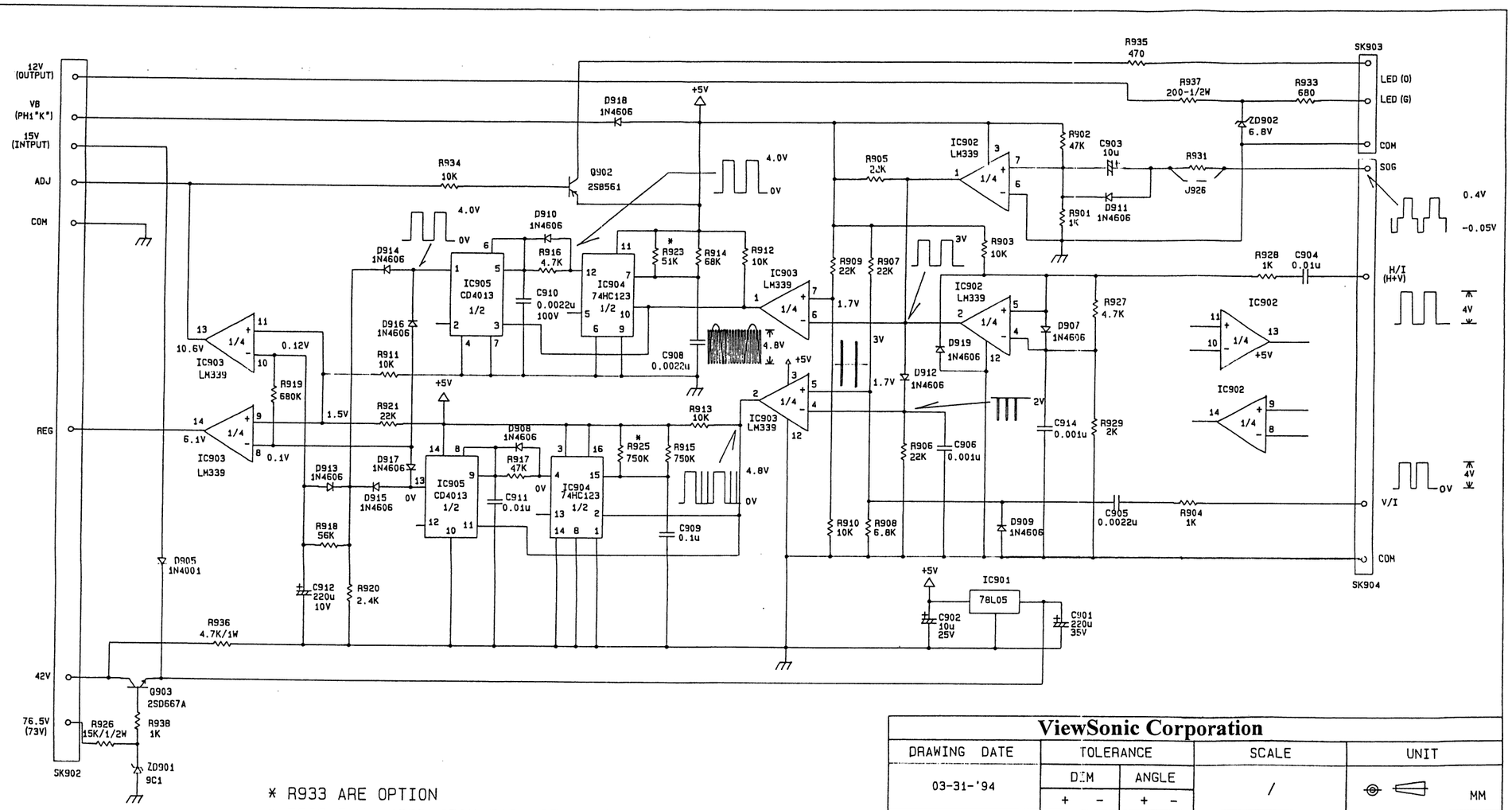
13.IMAGE PERFORMANCE CONFIRMATION:
A:H & V LINEARITY:
INPUT EACH PRESET MODE (H*V=10*8 CROSS HATCH PATTERN).
H LINEARITY: | MAX.-MIN./MAX. | *100% ≦ 10%
V LINEARITY: | MAX.-MIN./MAX. | *100% ≦ 7.5%

B:RECALL BUTTOM FUNTION CONFIRMATION:
a.ADJUST THE H/V PHASE AND THE H/V SIZE TO ANY POSITION, PRESS THE RECALL BUTTON, THEN CHECK THAT THE IMAGE PERFORMANCE IS IN ACCORDANCE WITH THE SPEC. IF YES, THIS MEANS THE RECALL BUTTON IS O.K.

b.ADJUST THE R.B.COLOR TO ANY POSITION, PRESS THE RECALL BUTTON, THEN CHECK THAT THE WHITE BALANCE YES OR NO IN SPEC.

14.HELMHOLTZ CHAMBER SET-UP:
SET-UP THE LOCATION ACCORDING TO THE CUSTOMER'S REQUIREMENT.

DATE	ECN/ECO NO.
11-17-'93	N-11059304EG
11-26-'93	N-11199302EG
12-16-'93	N-12069301EG
01-08-'94	O-12279304RT



* R933 ARE OPTION

* R923: 51K. R925: 750K FOR HITACHI/TOSHIBA IC74HC123

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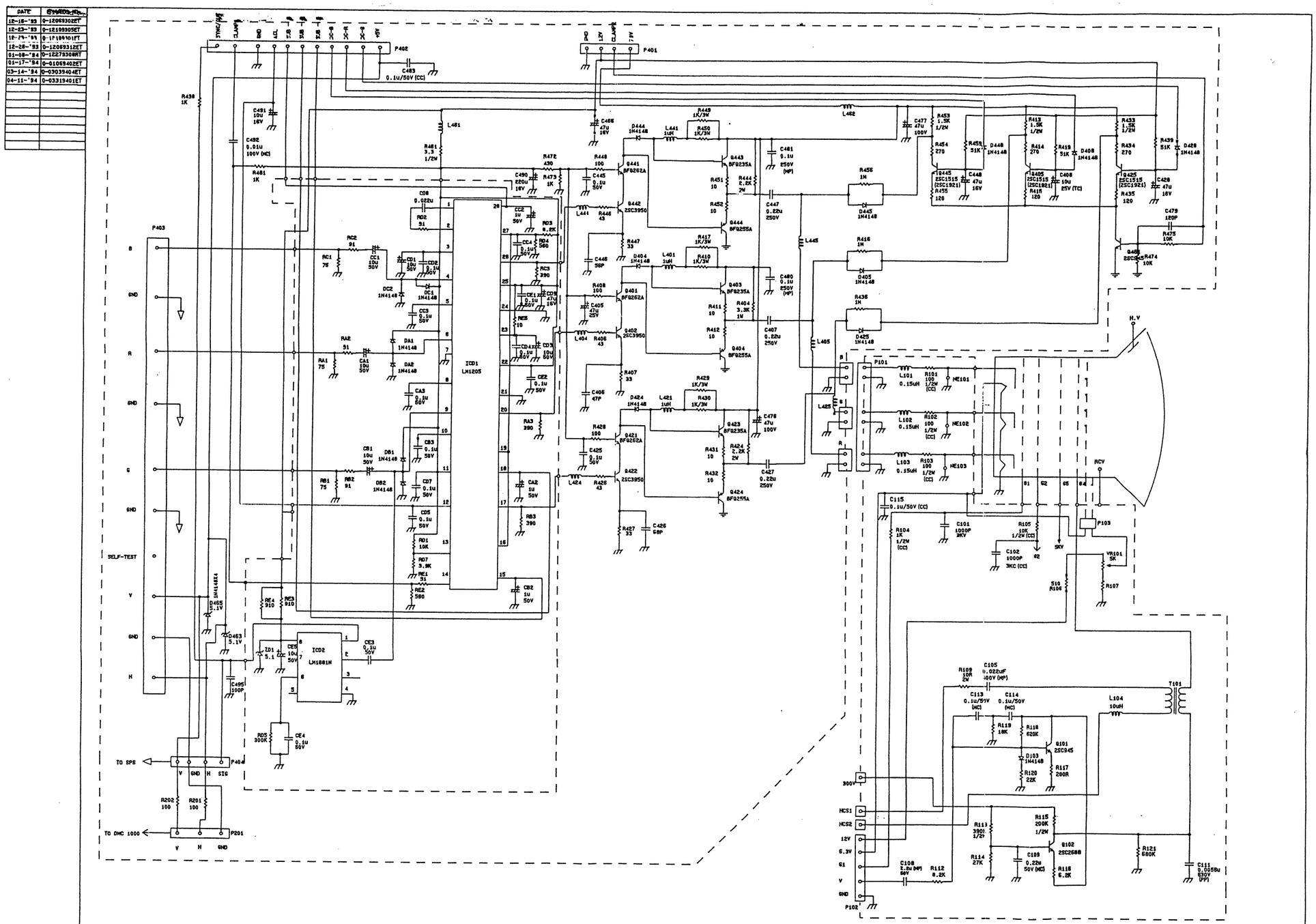
03-31-'94	DIM	ANGLE	/	MM
	+ -	+ -		
DRAWER	SHEET		DRAWING NAME	FILE NAME
	OF		POWER SAVING	
MODEL NO.: 4000TC				

DATE	SYMBOL NO.
12-16-'93	0-12069302ET
12-23-'93	0-12109305ET
12-29-'93	0-1P109301FT
12-28-'93	0-12069312ET
01-08-'94	0-12279308RT
01-17-'94	0-01069402ET
03-14-'94	0-03039404ET
04-11-'94	0-03319401ET



ViewSonic Corporation				
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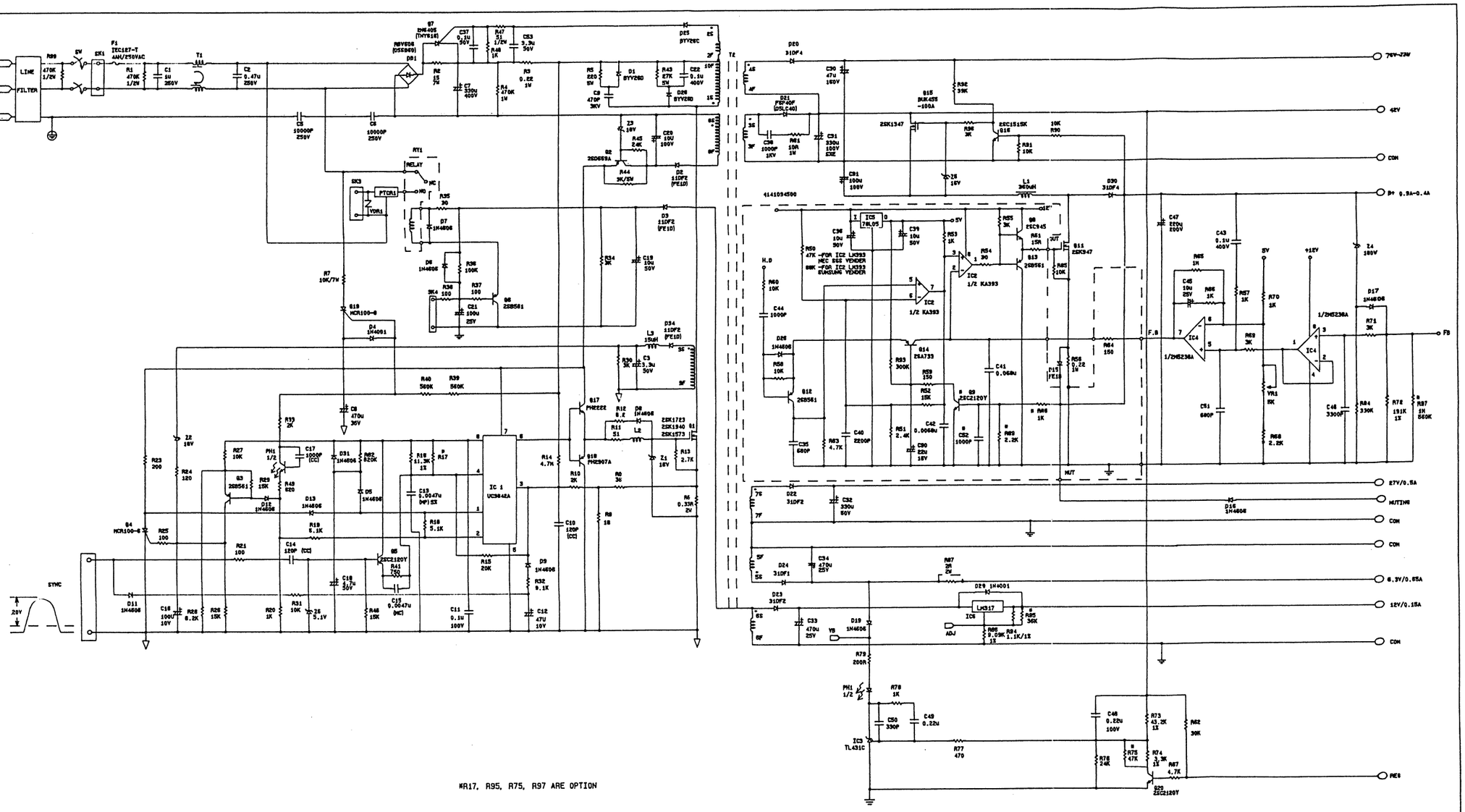
05-03-'94	DIM	ANGLE	/	MM
	+ -	+ -		
DRAWER	SHEET		DRAWING NAME	FILENAME
	OF		VIDEO CKT	

Model: 4000TC

DATE	ECN/ECO NO.
11-17-'93	M-1105930EB
11-26-'93	M-11E2930EU
12-16-'93	O-12069301ET
01-06-'93	O-1E189301ET
02-16-'94	O-0111940PRT
02-16-'94	O-0128940IET
05-05-'94	O-0423940ENT



WR17, R95, R75, R97 ARE OPTION

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DRAWER	SHEET		DRAWING NAME	FILENAME
	OF		POWER SUPPLY	
MODEL NO.:	4000TC			

DATE	PCB/PCB NO.
11-03-'83	P-1115830760
12-15-'83	P-1206830760
1-12-'84	P-1215830760
12-25-'83	P-1210830760
12-09-'83	P-1206831260
01-11-'84	P-1227830460
01-17-'84	P-0106840460
01-31-'84	P-0116840960
02-07-'84	P-0126840460
02-10-'84	P-0201840960
02-22-'84	P-0207840160
02-22-'84	P-0207840160
03-06-'84	P-0215840160
03-06-'84	P-0215840160
04-25-'84	P-0415840460
05-25-'84	P-0506840160

MEMBRANE SW PCB

P701

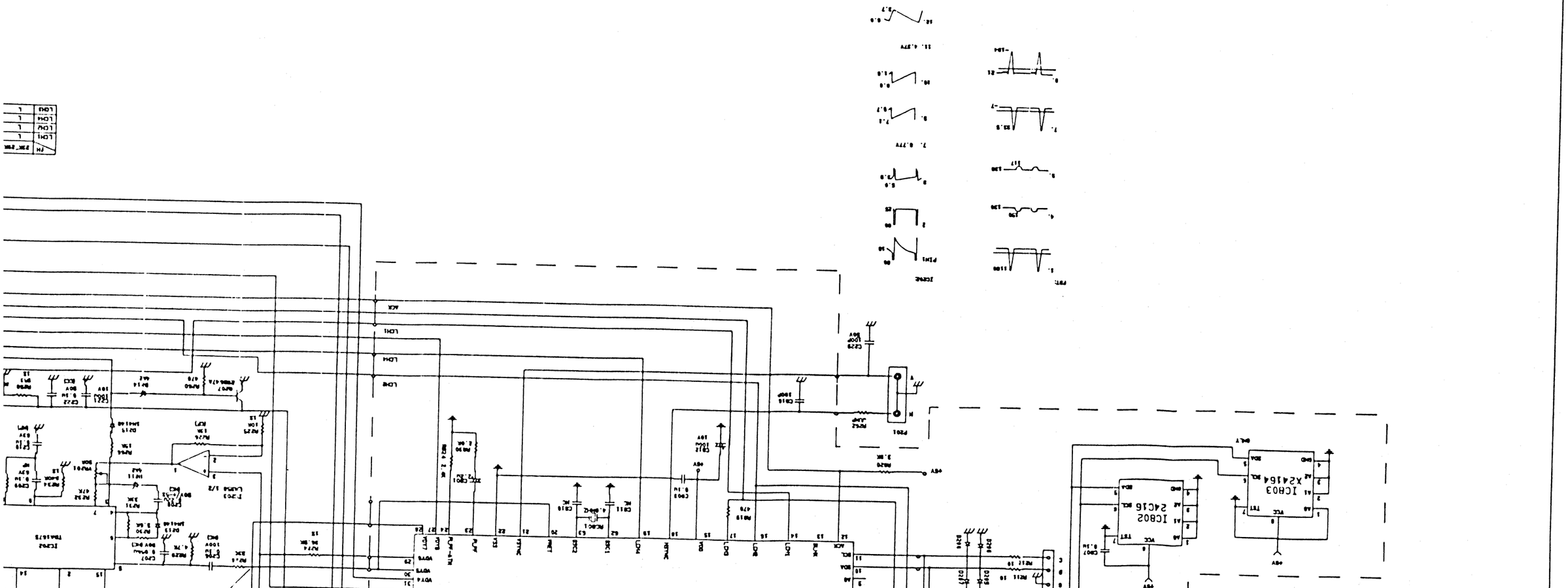
IC 801

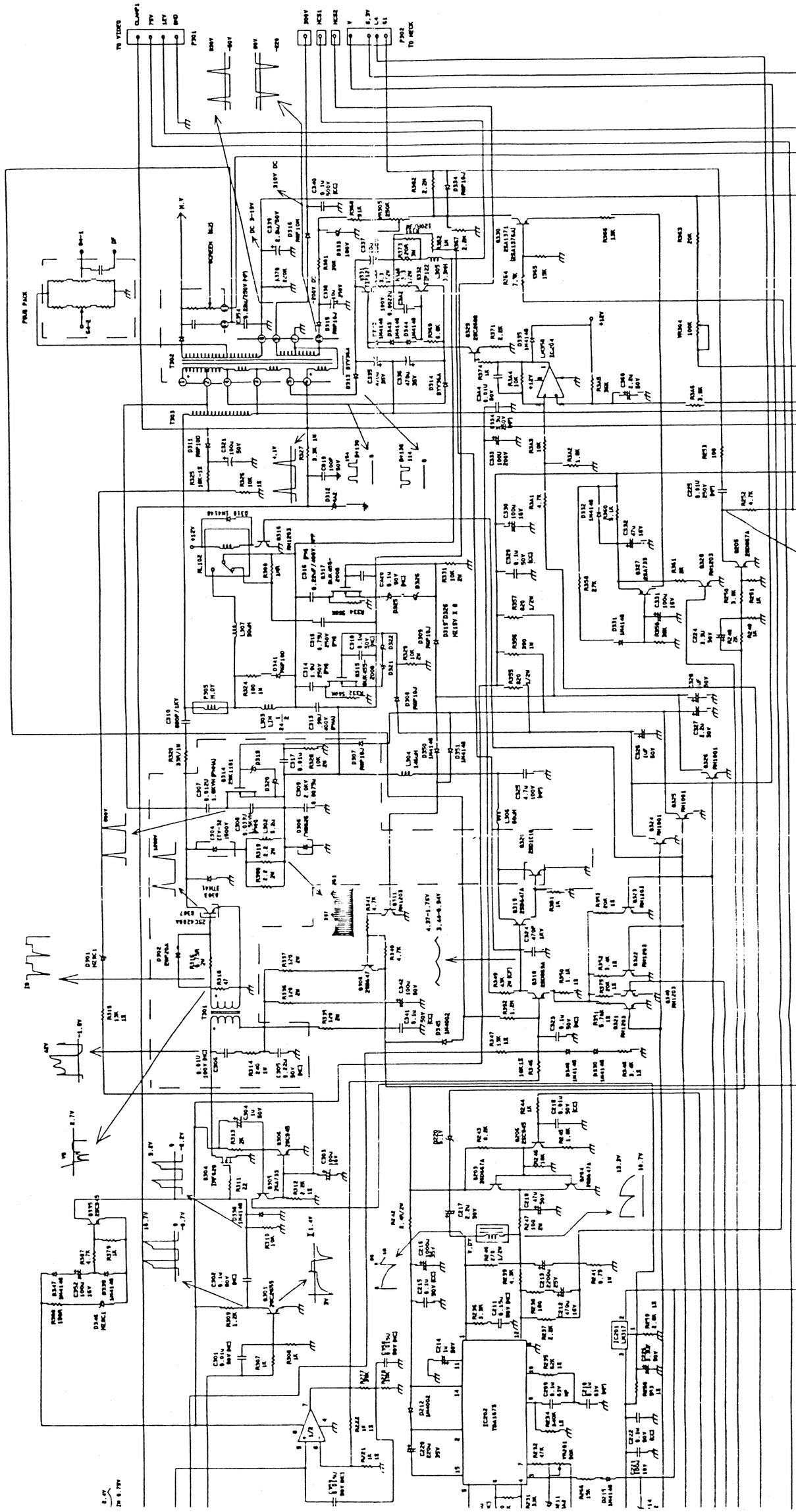
DMC - 1000-G

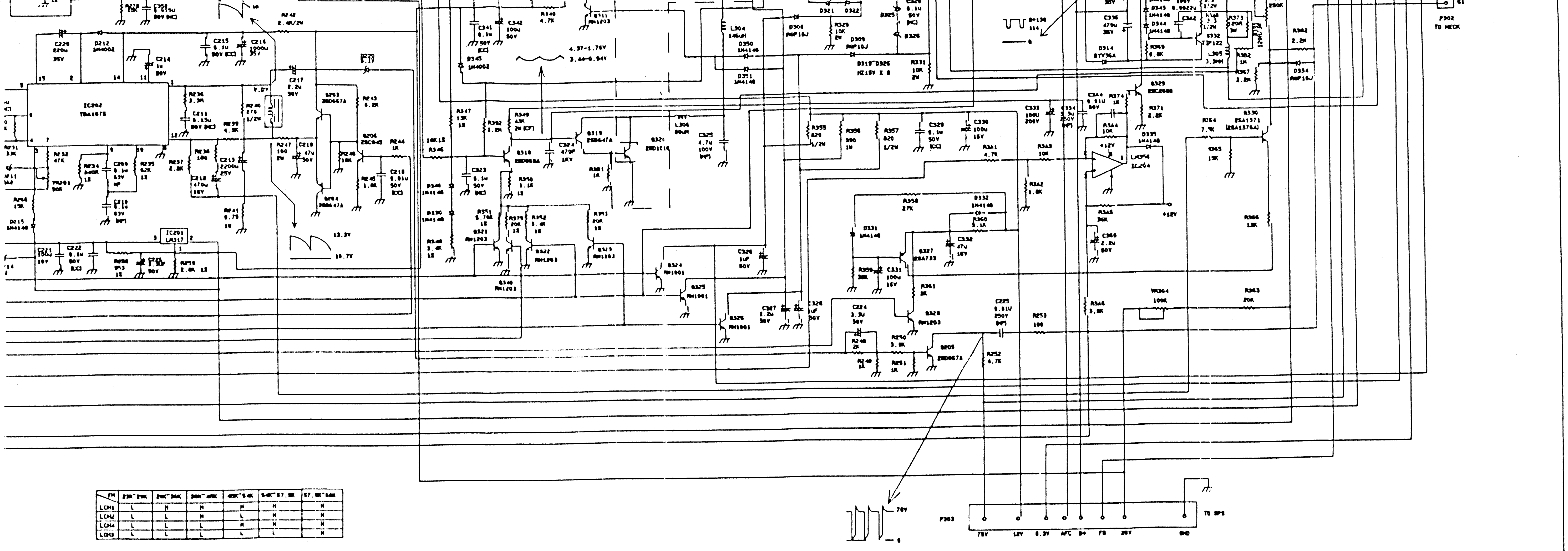
IC802 24C16

IC803 X24164

IC701 74HC374







FH	23K~29K	29K~36K	36K~48K	48K~54K	54K~57.8K	57.8K~64K
LCH1	L	H	H	H	H	H
LCH2	L	L	H	L	H	H
LCH4	L	L	L	H	H	H
LCH3	L	L	L	L	L	H

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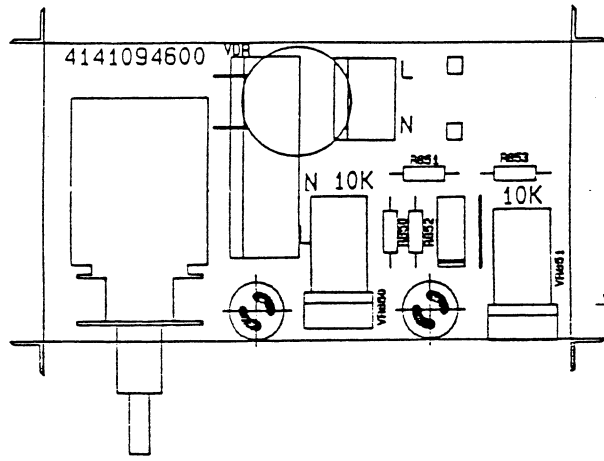
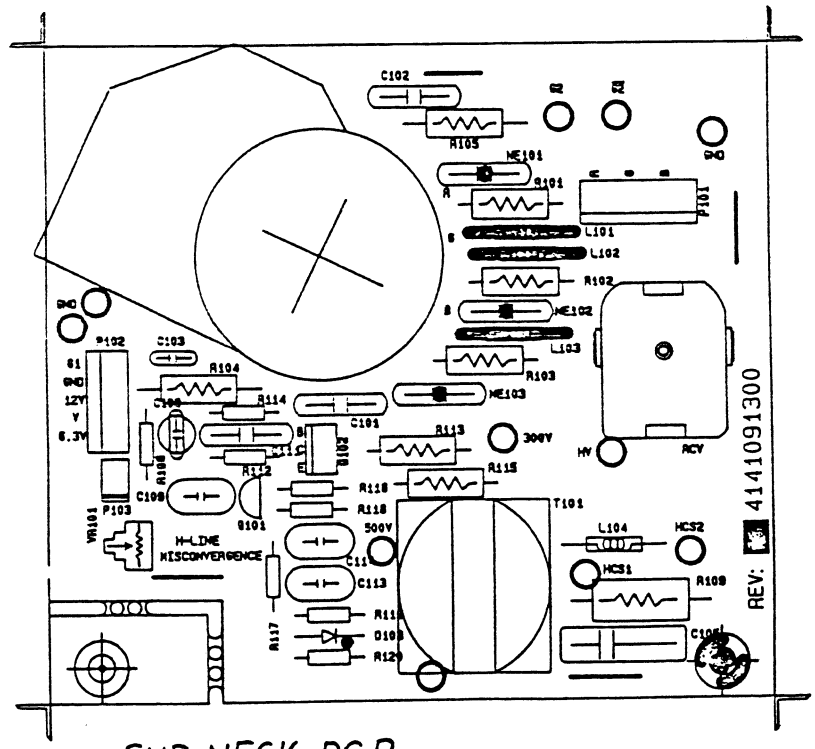
DRAWING DATE	TOLERANCE		SCALE	UNIT
	DIM	ANGLE	/	MM
	+ -	+ -		
DRAWER	SHEET		DRAWING NAME	FILENAME
	OF		DEF	

MODEL NO.: 4000TC

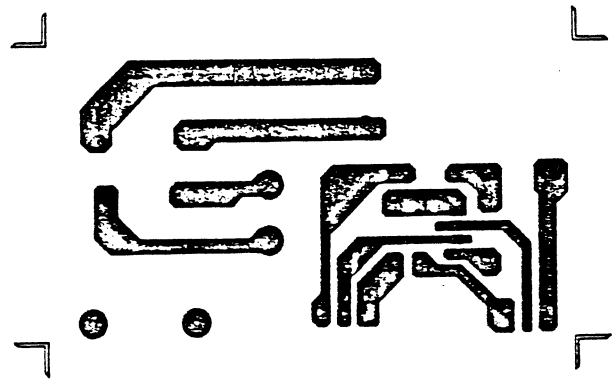
PCB LAYOUT DRAWING

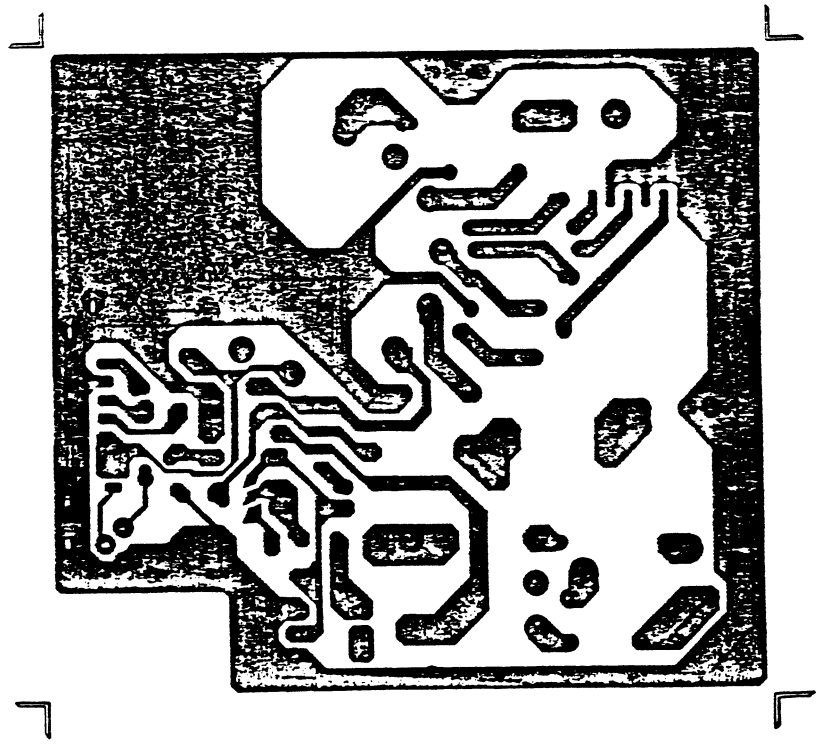


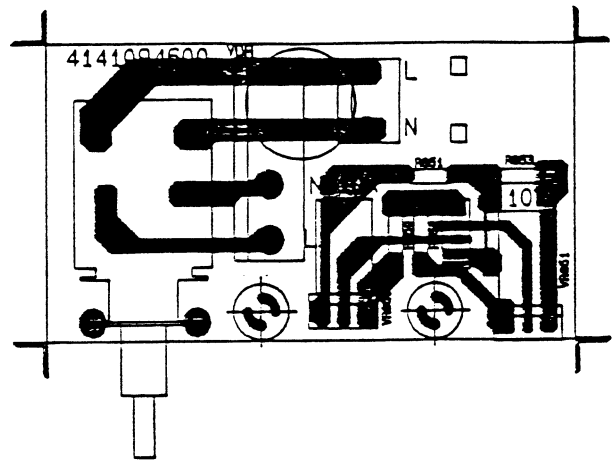
SWITCH PCB



SUB NECK PCB



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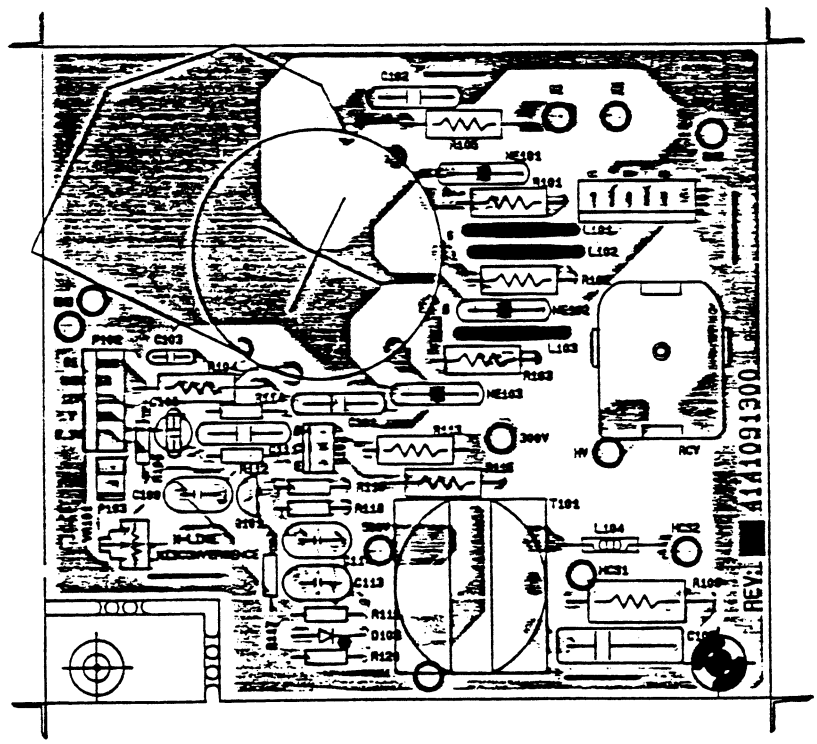
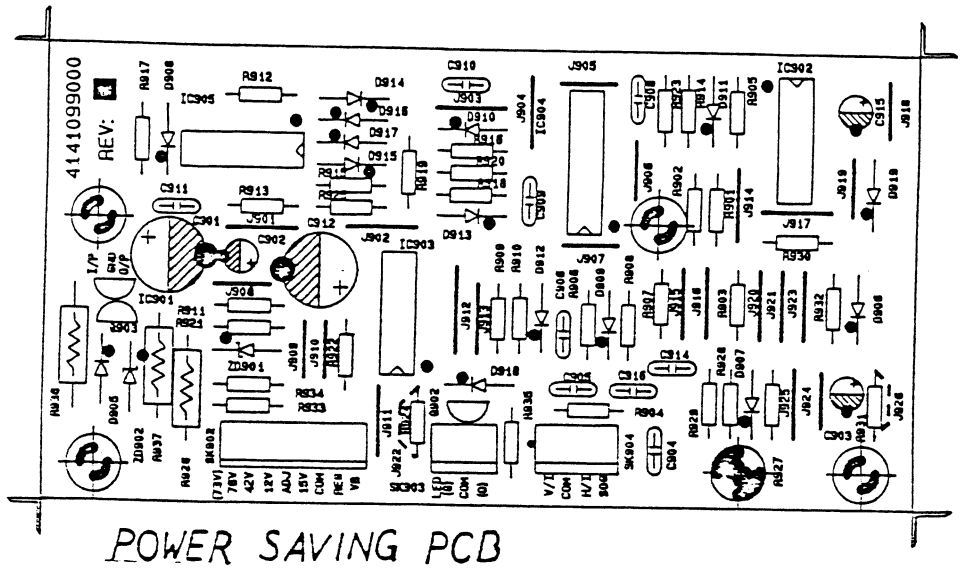
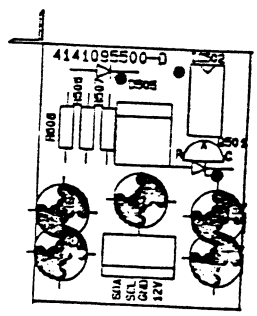
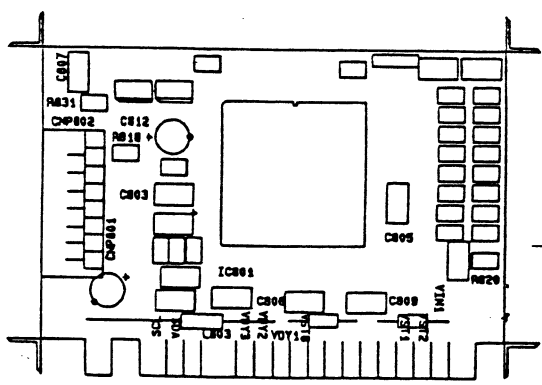

T101
300V
HV
RCV



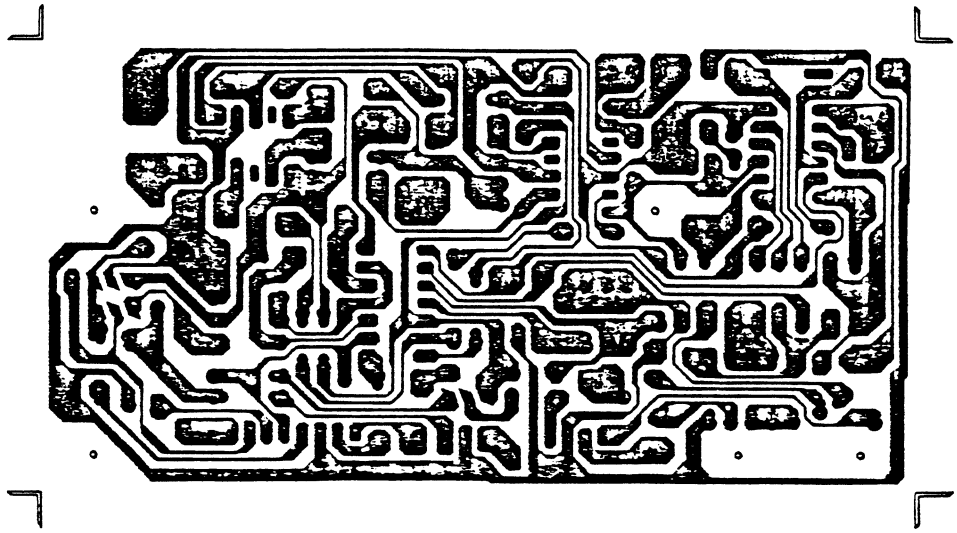
POWER SAVING PCB

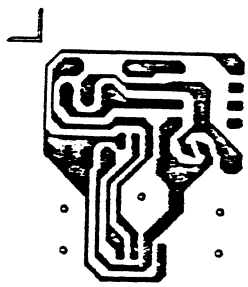


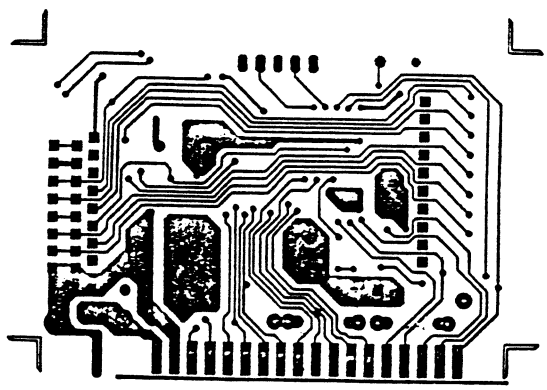
I2C PCB

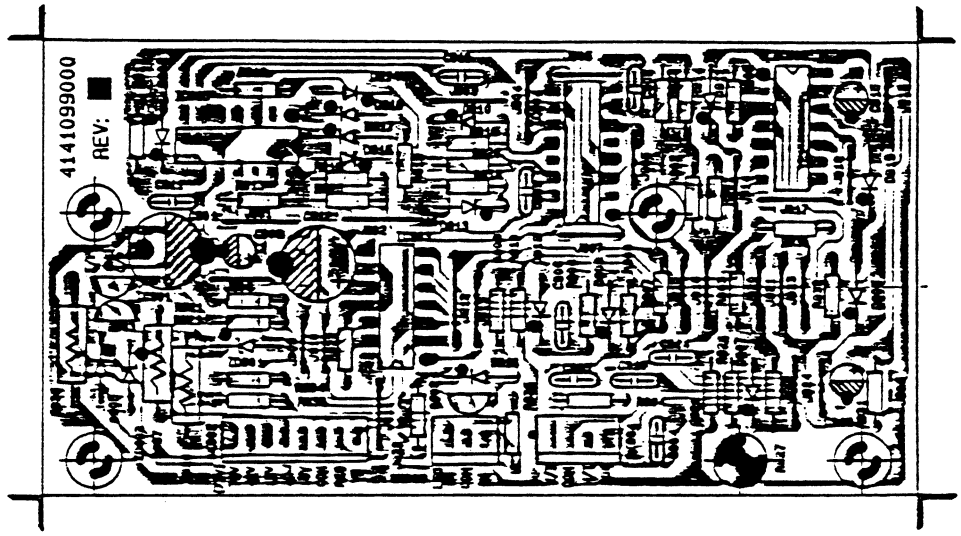


DMC 1000 PCB





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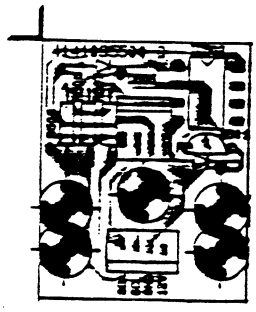
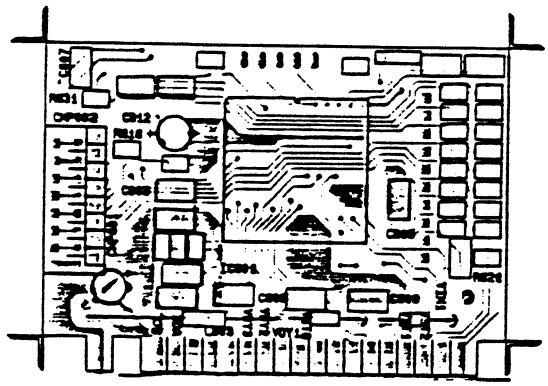
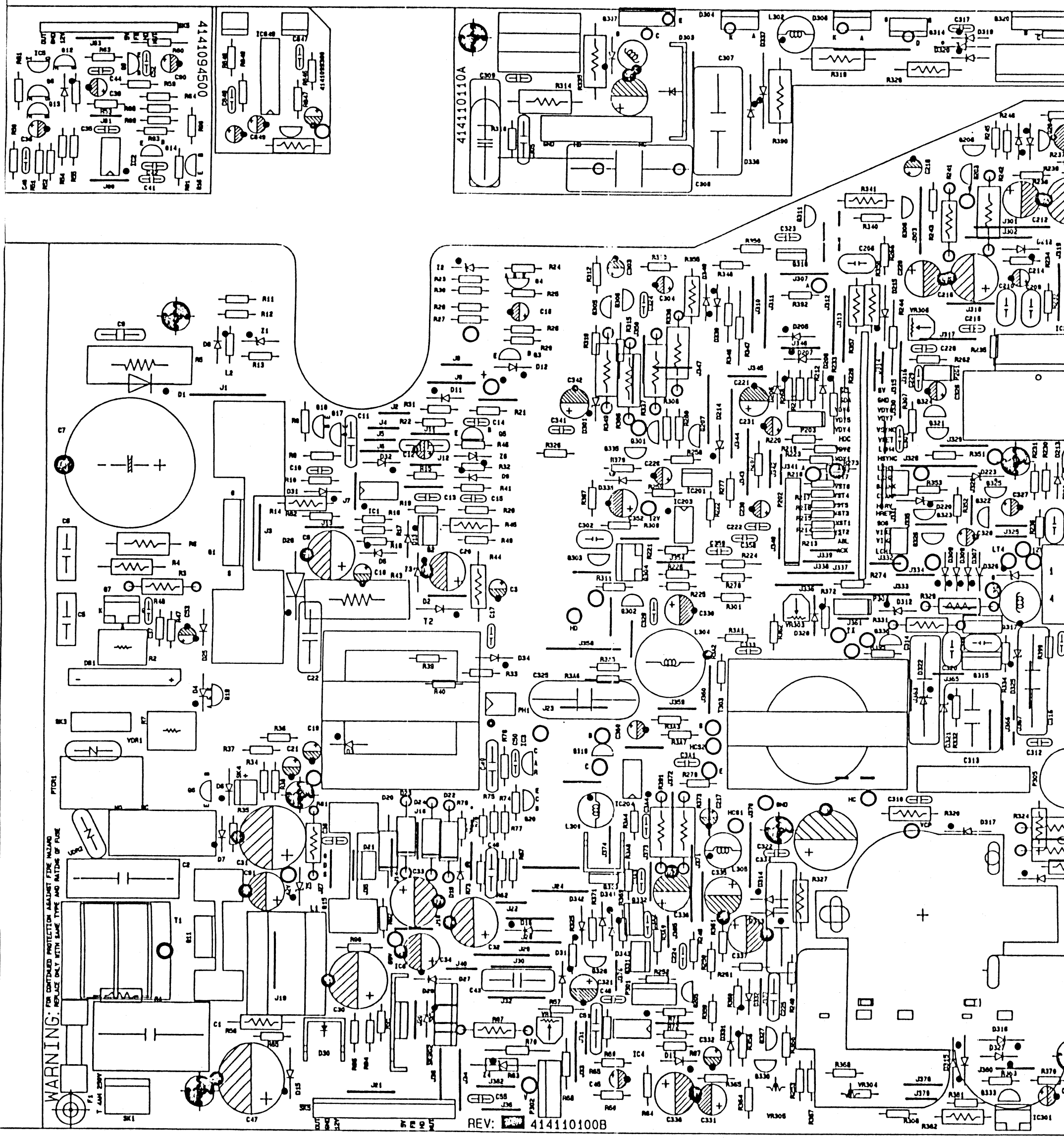




DC-DC CONVERTER PCB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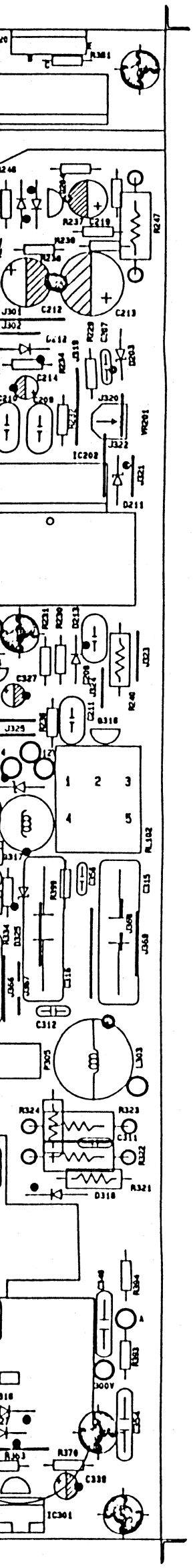
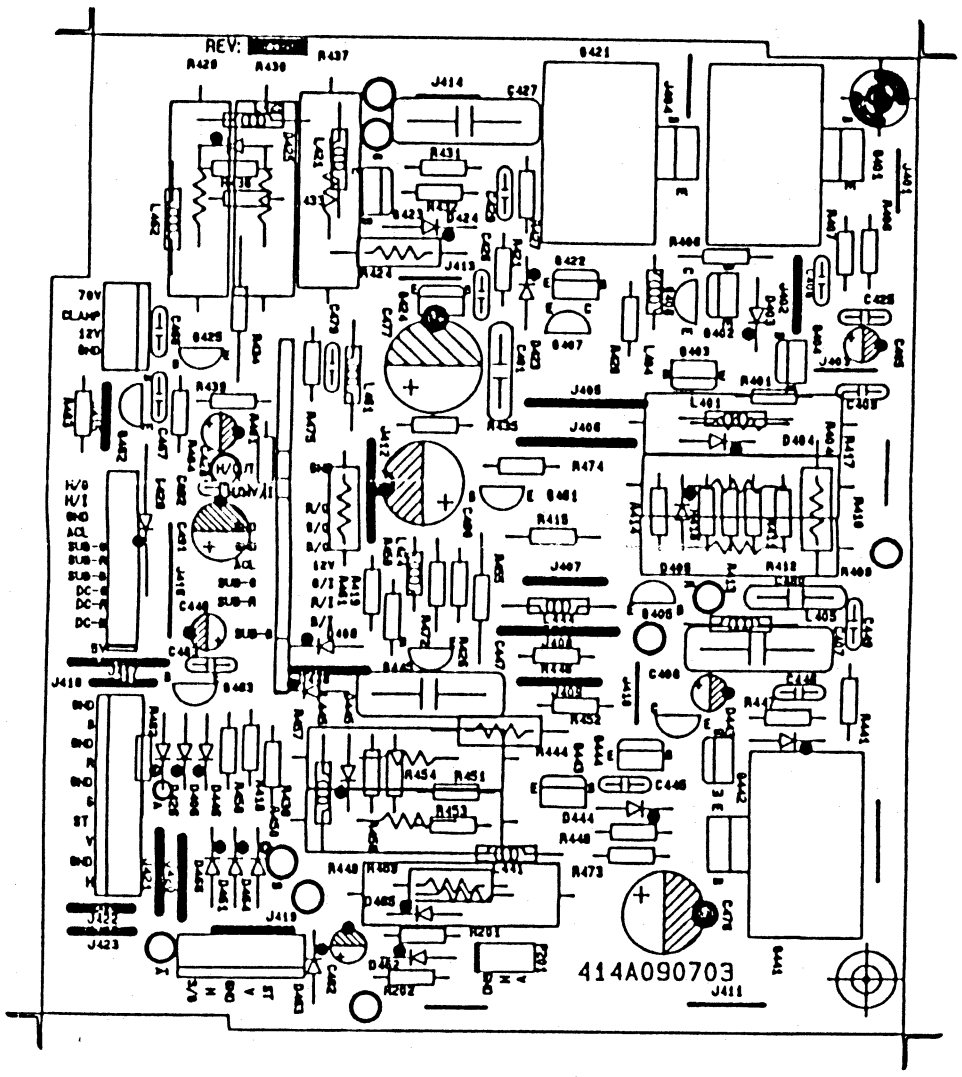
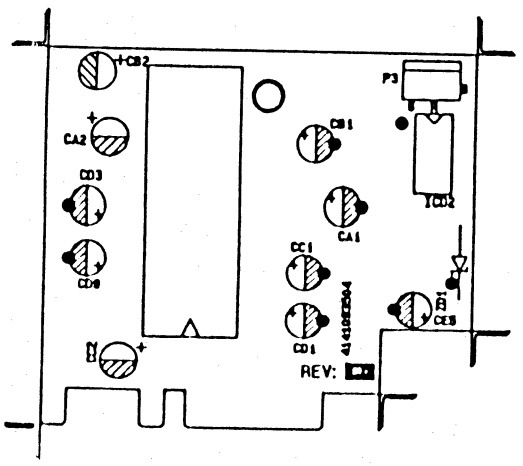
WARNING: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE
REV: 414110100B

MAIN PCB

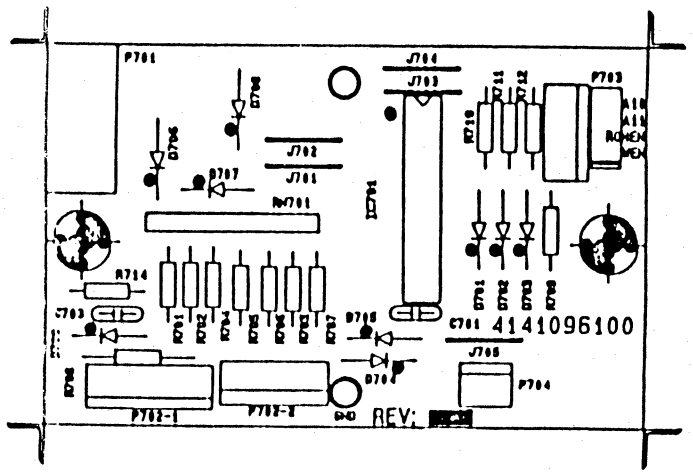




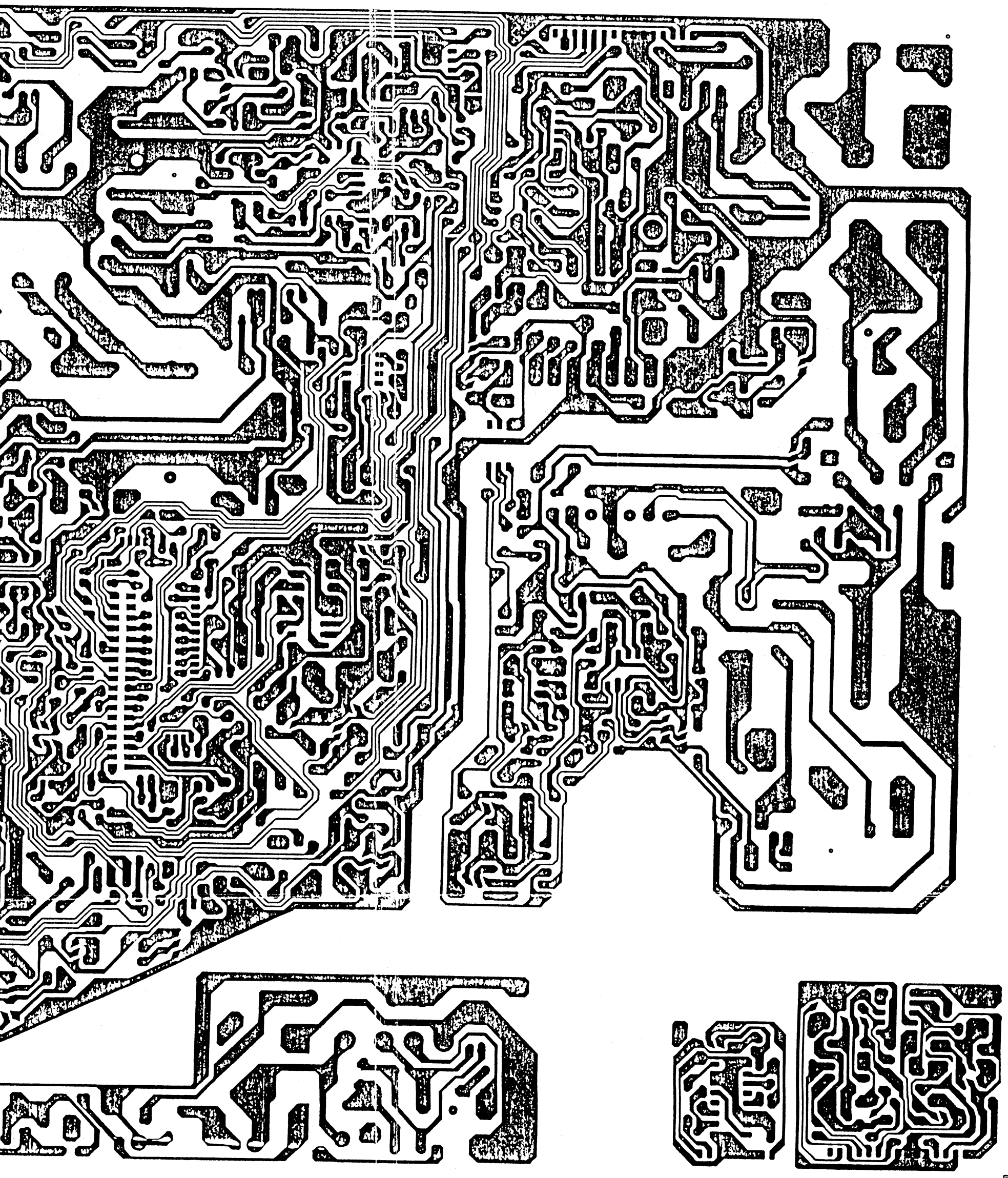
NECK PCB

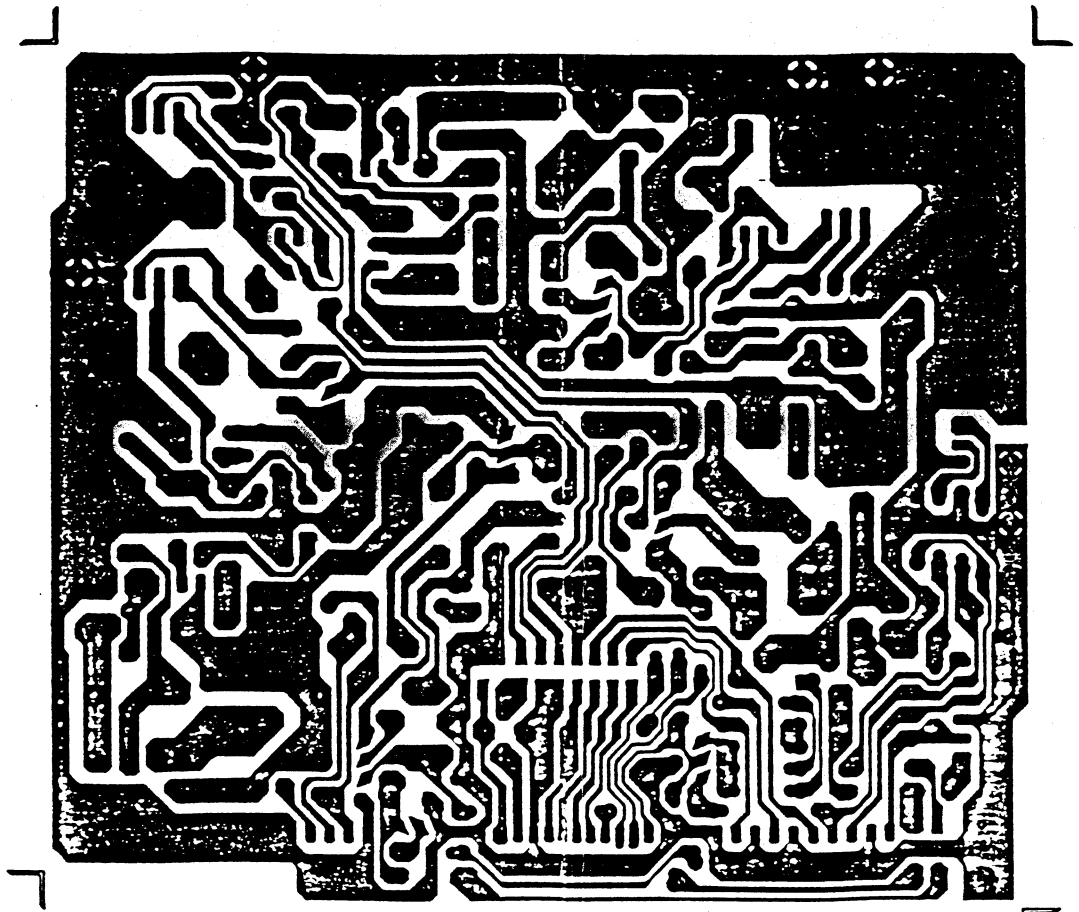


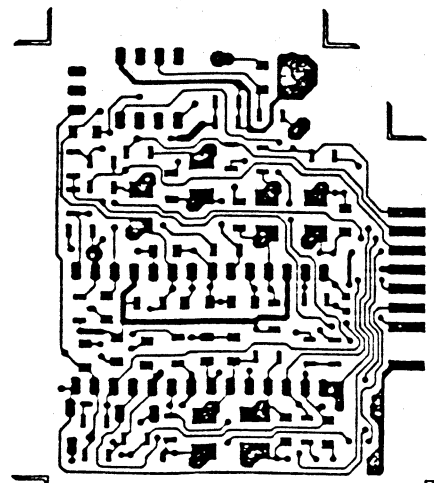
IC VIDEO PCB

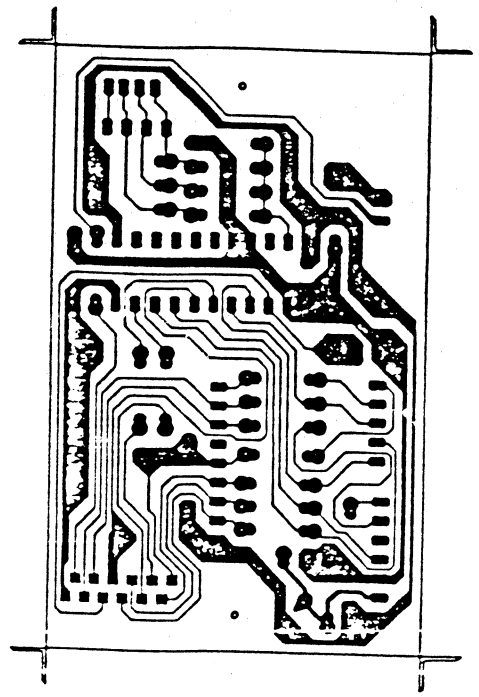


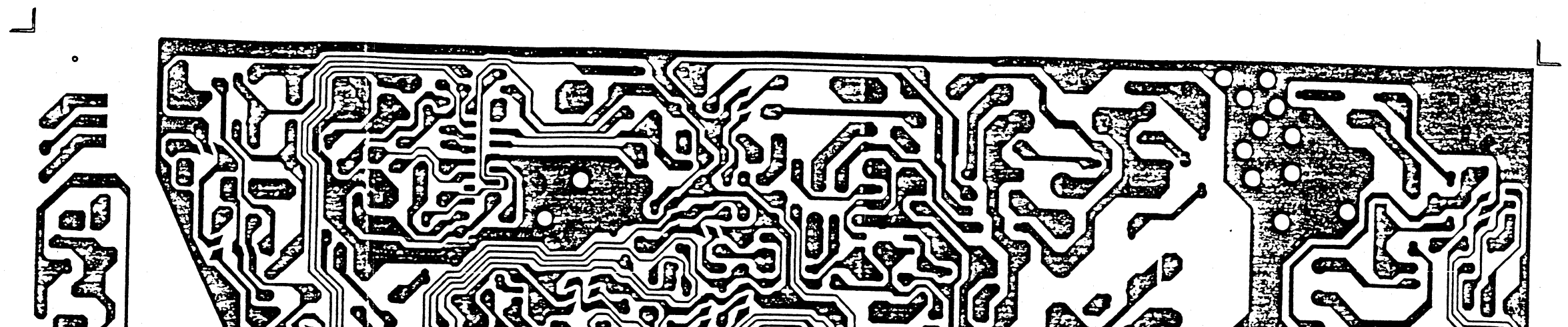
KEY BOARD PCB

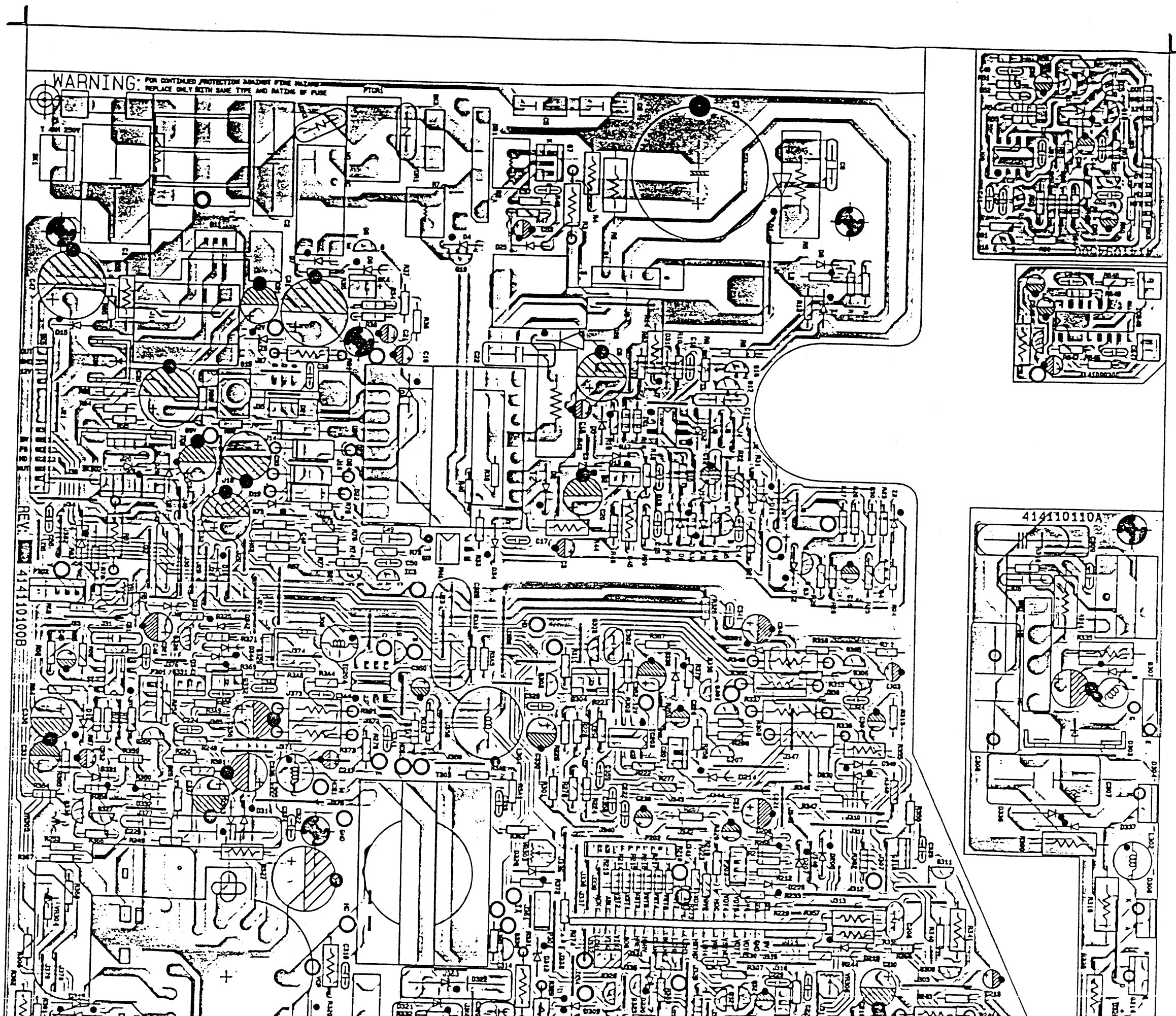











WARNING:
REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE
REV:
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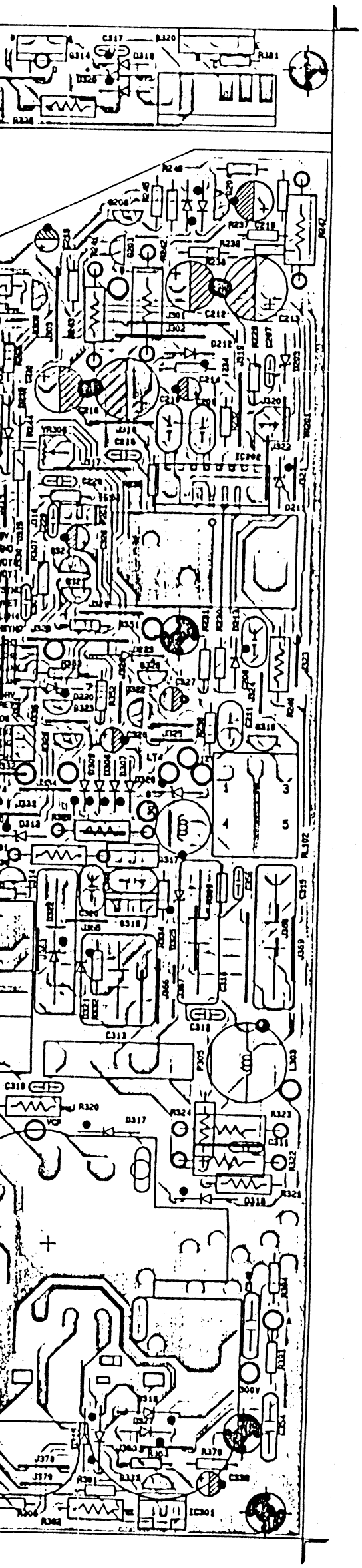

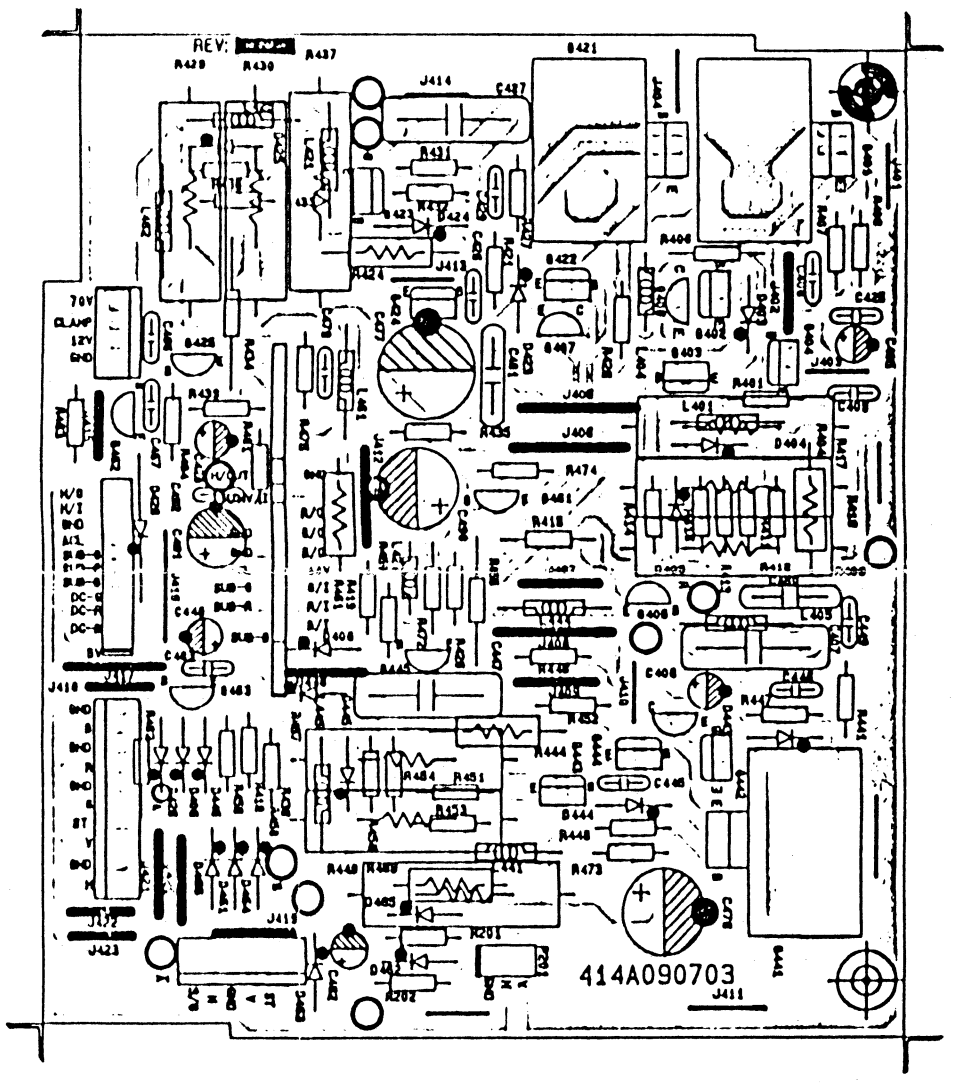
REV:
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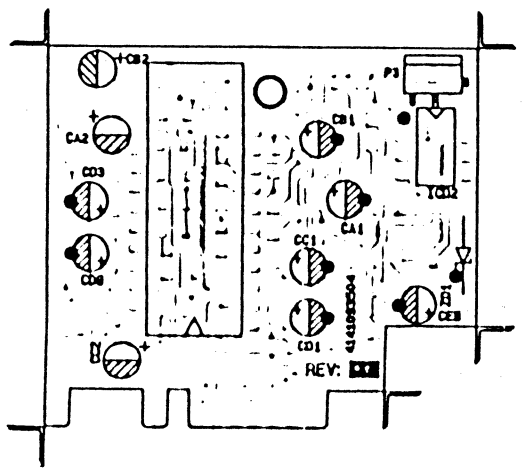
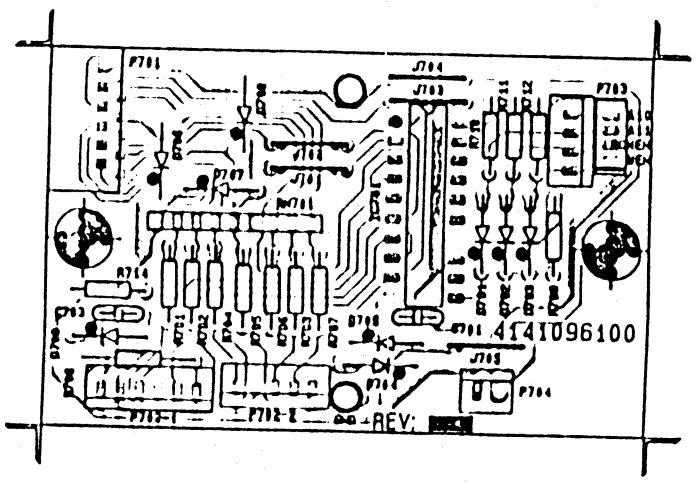

REV: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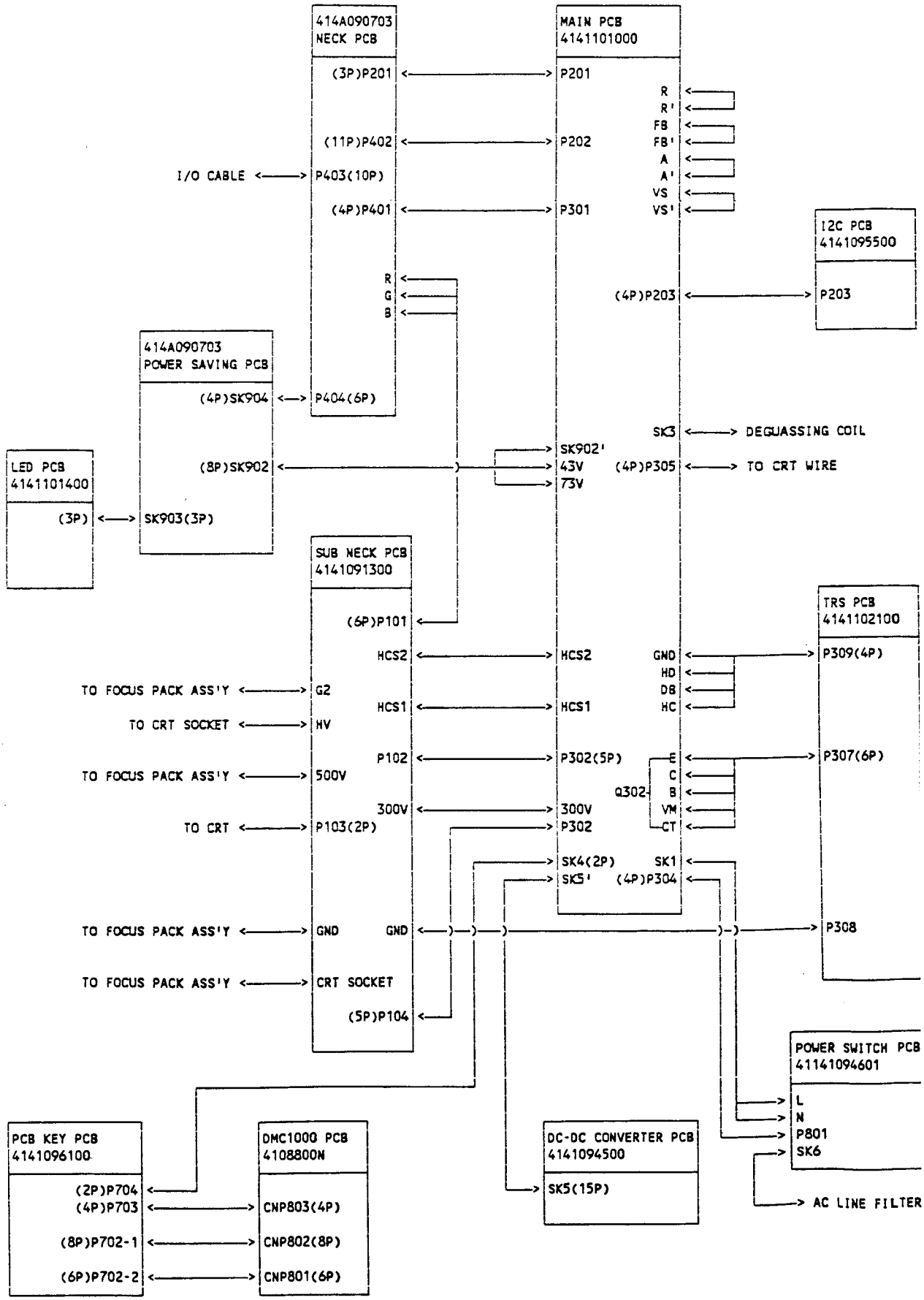
REV:

PCB WIRE CONNECTION



Replacement Parts List

SPARE	Item Number	Description	COMMENT
S	1002096320	COVER REAR	
S	1002096330	CONTROL DOOR	
	1005094700	TILT BALL	
	1006094251	RETAINER	
	1009094238	LATCH	
S	1010094310	FOOT	FOR BASE
	101509433P	DOOR LOCK	
S	1020094623	BASE-2	
	2004694251	CHASSIS TOP	
	4491506705	ADAPTOR	
S	463310001N	AC POWER CORD WALL UL/CSA GRY	
	8037114016	SCREW BIND(+) M4X16 HI-LOW	FOR TILT BASE & LATCH
	8081115030	SCREW BID(+)/HD MECH 1/4"-20X3	FOR BASE & RETAINER
	8127113006	SCREW PAN(+)/HD CAP TAPPING M3	CHAS TOP & CHAS R X2,CHAS TOP & CHAS L X2
	8350113016	SCREW BIND(+) M3X16 W/S W.F.W.	FOR REAR COVER & BEZEL BKT X4
	8504113006	SCREW BID(+) M3X6 MACH W/DISK	CHAS REAR & CHAS TOP X1
	9004096320	COVER I2C	
	9012096705	MANUAL	
	C459423L10	GND WIRE ASS'Y	FOR FILTER
	C488030174	CONN. 3P & WIRE CORE ASS'Y	FOR LINE FILTER TO SWITCH
	4070247455	RES-MF 1/2W J 470K -AT-	R99 (FOR LINE FILTER)
	5290003000	TUBE-SHRINK ID=3¢	FOR LINE FILTER
	5290005000	TUBE-SHRINK ID=5¢	FOR LINE FILTER
S	7066700129	LINE FILTER	FILTER
	1006096330	SNAP BUSHINGS (NB1722)	FOR STAND
	1013094180	REVLT ¢3	FOR I2C PCB
	2002196700	STAND I/O CABLE	
	2003096700	BKT UPPER	
	3011100030	NUT ISO HEX M3 Z1NC	
	3211300000	WASHER SPRING M3 5.2¢X3.2¢X0.8	
	4410501100	MEMBRANE SWITCH 12PIN CAM6710	
	5530310009	PCB SUPPORT PS-03GA	FOR STAND & PCB
	5541025095	CABLE TIE 2.5X90	
	8002113012	SCREW FLATE HD(+) M3X12	FOR AC SOCKET
	8127113006	SCREW PAN(+)/HD CAP TAPPING M3	FOR UPPER BKT & STAND X4
	8504113008	SCREW BIND(+) M3X8 MACH W/DISK	FOR VR BKT & UPPER BKT X2
	9007096700	DECO SHEET (R)	
	9008096700	DECO SHEET (L)	
	9010096330	SW INSULATOR	
	2004094660	HEAT SINK HOLDER	FOR D304
	2010096710	CHASSIS REAR	
	3060040060	RIVET NYLON 4.0X6.0	FOR TRANSISTOR PCB
S	410024288A	TRS.2SC4288A TO-3PL	FOR Q307
S	4100310180	TRS. 2SD1018 W/MOUNTING KIT	Q320
S	4101511010	TRS. MOSFET 2SK1101 SC-67	Q314
S	4130400260	DIODE FMGG26S TO-220	D306
S	4130600032	DIODE DTV32-1500B	D304
	5510102500	TUBE SI-RUBBER 45T-11¢X25L	FOR D304
	5520100005	INSULATOR SI-RUBBER TO-3P	FOR Q307,320
	8026113010	SCREW BIND(+) TAPPING M3X10 TR	FOR Q314,320 & CHAS REAR
	8026113012	SCREW BIND(+) ZN3C M3X12 SELF	FOR Q307,320 & CHAS REAR
	8026113014	SCREW TRI "B" M3X14	FOR H/S HOLDER & CHAS REAR
	C001132790	BRAID WIRE ASS'Y	
S	C710671110	I/O CABLE ASS'Y	
	1001196330	CONTROL BOX	
	1003096330	KNOB PUSH	
	1004099000	BUSHING SNAP (NB-1216)	FOR CRT FRAME
	1013091740	MOVBLE BUSHING 100CM	FOR CRT FRAME
	1013094330	KNOB VR A	
	1015094330	KNOB VR B	
S	1016096705	BEZEL ASS'Y	BEZEL(1001096710) & LED LENS ASS'Y(1004098720)
	1023094000	BUSHING SNAP	FOR CHAS BOTTOM
	1023094330	SPACERS RING	
	1023096330	KNOB PUSH	
	2001294480	CRT FRAME	
	2002094660	CHASSIS (R)	
	2004096700	BKT LOWER	
	2008094251	BKT BEZEL	
	2012096710	CHASSIS L	
	201309632D	FINGER (B)	FOR CRT FRAME & CHAS R
	2016094230	STUD M3X12	FOR VIDEO PCB
	2017094030	GROUND CLAMP	FOR I/O CABLE
	2017096330	FOCUS BKT A	

	2018094140	TOOTHED LOCK WASHER	FOR CRT & CRT FRAME X4
	2024094660	CHASSIS (BTM)	
	3051100050	NUT ZINC CHROMATE M5	FOR CRT & CRT FRAME X4
	5530200101	CORD CRAMP TH-C	FOR CHASS R X2, MAIN PCB X1
	5530200102	CORD CRAMPER TH-A	FOR CHASS REAR X1
	5530307005	SUPPORT PCB CBS-8K	POWER SAVING BOARD
	5541025095	CABLE TIE 2.5X90	
	5541025160	CABLE TIE-BINDING 2.5X160	FOR DEGAUSSING COIL X14, OTHER X3
S	7010021717	CRT 17FQ2-D2	
	7020176710	DEGAUSSING COIL	FOR CRT
	8026113008	SCREW BID(+) ZINC M3X8 TAPPING	FOR FOCUS PAD & BKT X2,STAND & CRT FRAME X2
	8026113012	SCREW BIND(+) ZN3C M3X12 SELF	BZL BKT & BZL X8
	8121114008	SCREW CAP BID(+) M4X8 TAPPING"	FOR CHAS BTM MAIN GND X1,CHAS BTM I/O GND X1,CHAS REAR MAIN GND X1
	8127113006	SCREW PAN(+)/HD CAP TAPPING M3	FOR CHAS R & CRT FRAME X2,CHAS L & CRT FRAME X2, CHAS BTM & CRT FRAME X2,CHAS BTM & CHAS R X2,CHAS BTM & CHAS L X2,CHAS REAR & CHAS R X2,CHAS REAR & CHAS L X2,CHAS REAR & CHAS BTM X2,LOWER BKT & UPPE R BKT X4
	8504113006	SCREW BID(+) M3X6 MACH W/DISK	FOR VIDEO PCBX8,CHAS L&BKTX2,POWER SAVING X1
	8504113008	SCREW BIND(+) M3X8 MACH W/DISK	FOR CONTROL BOX & LOWER BKT X4, MAIN PCB X6
	8504113010	SCREW BIND(+) M3X10 MACH W/DIS	FOR CRT FRAME & BEZEL BKT X4
	9006096700	DECO PLATE (I/O CABLE)	

---------- END ----------

SPARE	Item Number	Description	COMMENT
S	SS67000220-404	POWER SWITCH & VR ASS'Y	
	C488030173	CONN. 3P & WIRE ASS'Y	FOR SW TO PCB
	2007096330	VR BKT	FOR VR850,851
	4050430255	RES-CF 1/4W J 3K -AT-	R850
	4050447255	RES-CF 1/4W J 4.7K -AT-	R852
S	4141094602	PCB SW (42.6X76.2)	
S	4410204004	SWITCH POWER SDDS3287U-CK	
	4490310193	CONN. 3P WAFER 2 OPEN RIGHT	FOR SK6(SW P.C.B)
S	502103B305	VR 10KB +-20%	VR850,851
	5406100000-000	JUMP WIRE 0.6¢	J801,802,803

END

SPARE	Item Number	Description	COMMENT
S	SS67000420-404	LED & PCB ASS'Y	
	C488030192	CONN. 3P WIRE ASS'Y	FOR LED TO SK903
S	4120624630	LED G/O BI-COLOR LT2463-23	LED
S	4141101400	P.C.B. LED (12X10)	

END

SPARE	Item Number	Description	COMMENT
S	AM67000244-V	NECK PCB ASS'Y (SUB-2)	
	2043394330	HEAT SINK	FOR Q401,421,441
	3011100030	NUT ISO HEX M3 Z1NC	FOR Q401,421,441
S	41061262A0	TRS. BFQ262A TO-126	Q401,421,441
	5520542001	INSULATOR CERAMIC TO-126	FOR Q401,421,441
	8504113012	SCREW BIND(+) M3X12 MACH W/DIS	FOR Q401,421,441
	C488060046	CONN. 6P & WIRE ASS'Y	FRO VIDEO PCB TO SUB NECK PCB
S	4100239500	TRS. 2SC3950 TO-126	Q402,422,442
S	41061235A0	TRS. BFQ235A TO-220	Q403,423,443
S	41061255A0	TRS. BFQ255A TO-220	Q404,424,444
S	4110219210	TRS. 2SC1921 TO-92M -RT-	Q425
S	4172022256	RES-MOF 2W J 2.2K -SF-	R424,444
S	4173010253	RES-MOF 3W J 1K -SF-	R410,417,429,430,449,450
	4490300260	WAFER 3P 2.0MM 173981-3	P201
	4490400300	CONN. 4P SXB-XH	P401
	4490600130	CONN. 6P WAFER 2.5MM B-XH-A/P2	P404
	4491000300	BASE 10P 2.54MM SXB-XH-A	P403
	4491100320	WAFER 11P 2.0mm 173979 R/A	P402
	5074104102	CAP-MEF 0.1UFK 250V -SF-	C480,481
	5074224102	CAP-MEF 0.22UFK 250V -SF-	C407,427,447
	515E470S01	CAP-ECE 47UFM 100V -SF-	C476,477
	5290010000	TUBE-SHRINK ID=10¢	FOR C480
	5322100301	WIRE UL1007 #22 TC BLK 20-5-5	FOR A-A'
S	411020945P	TRS. 2SC945P TO-92 -RT-	Q461
S	4110219210	TRS. 2SC1921 TO-92M -RT-	Q405,445
	5116103111	CAP-MC 0.01UFK 100V -RT-	C492
	5128101552	CAP-CCSL 100PFJ 50V -RT-	C495
	5128121552	CAP-CCSL 120PFJ 50V -RT-	C479
	5128470552	CAP-CCSL 47PFJ 50V -RT-	C406
	5128560552	CAP-CCSL 56PFJ 50V -RT-	C446
	5128680552	CAP-CCSL 68PFJ 50V -RT-	C426
	5134104452	CAP-SCF 0.1UFZ 50V -RT-	C425,445,483
	515A221T16	CAP-EC +-20% 220UF/16V -RT-	C490
	515E470T25	CAP-ECE 47UFM 25V -RT-	C405,466
	515X100T16	CAP-ECX 10UFM 16V -RT-	C491
	515X221T16	CAP-ECX 220UFM 16V -RT-	C490
	515X470T16	CAP-ECX 47UFM 16V -RT-	C428,448
	5171106T25	CAP-TC 10UFM 25V RT	C408
	4050115255	RES-CF 1/2W J 1.5K -AT- SMALL	R413,433,453
	4050233955	RES-CF 1/2W J 3.3R -AT-	R461
	4050410055	RES-CF 1/4W J 10R -AT-	R411,412,431,432,451,452
	4050410155	RES-CF 1/4W J 100R -AT-	R201,202,408,428,448
	4050410255	RES-CF 1/4W J 1K -AT-	R438,473,481
	4050410355	RES-CF 1/4W J 10K -AT-	R474,475
S	4050410555	RES-CF 1/4W J 1M -AT-	R416,436,456
	4050412155	RES-CF 1/4W J 120R -AT-	R415,435,455
	4050427155	RES-CF 1/4W J 270R -AT-	R414,434,454
	4050433055	RES-CF 1/4W J 33R -AT-	R407,427,447
	4050443055	RES-CF 1/4W J 43R -AT-	R406,426,446
	4050443155	RES-CF 1/4W J 430R -AT-	R472
	4050451355	RES-CF 1/4W J 51K -AT-	R419,439,459
S	4120141480	DIODE 1N4148 (SI) -AT-	D404,405,408,424,425,428,444,445,448
S	4120500561	DIODE ZENER RD5.1EB2 1/2W -AT-	D463,465
S	414A090703	P.C.B. NECK (114.35X132.33)	
	4171033256	RES-MOF 1W J 3.3K -AT-	R404
	4321109006	COIL PEAKING 1UH -AT-	L401,421,441
	4322309006	FERRITE BEAD 3UH -AT-	L461,462
	5406100000-000	JUMP WIRE 0.6¢	J401-414,416,419,4A1-4A4,D403,423,443
	5560070016	CORE-FE (TR3.5X1.3X5) -AT-	L404,L405,424,425,444,445

END

SPARE	Item Number	Description	COMMENT
S	SS67000230-404	VIDEO IC PCB ASS'Y	
	4010800052	RES-CHIP 1/8W J 0R 1206	JD1,2
	4010810052	RES-CHIP 1/8W J 10R 1206	RE5
	4010810352	RES-CHIP 1/8W J 10K 1206	RD1
	4010830452	RES-CHIP 1/8W J 300K 1206	RD5
	4010839152	RES-CHIP 1/8W J 390R 1206	RA3,RB3,RC3
	4010839252	RES-CHIP 1/8W J 3.9K 1206	RD7
	4010856152	RES-CHIP 1/8W J 560R 1206	RE2,RD4
	4010875052	RES-CHIP 1/8W J 75R 1206	RA1,RB1,RC1
	4010882252	RES-CHIP 1/8W J 8.2K 1206	RD3
	4010891052	RES-CHIP 1/8W J 91R 1206	RA2,RB2,RC2,RD2,RE1
	4010891152	RES-CHIP 1/8W J 910R 1206	RE3,4
S	412014148T	DIODE 1N4148 (BAS32L) MLF SMD	DA1,2,DB1,2,DC1,2
S	4120500561	DIODE ZENER RD5.1EB2 1/2W -AT-	ZD1
S	4141093504	P.C.B. DAUGHTER (57.1X50.2)	
S	4159120500	IC LM1205N 28PIN	ICD1
S	4159188100	IC LM1881N 8PIN	ICD2
	5156100T50	CAP-EC6 10UFM 50V -RT-	CA1,CB1,CC1,CD1,CD3,CE5
	5156109T50	CAP-EC6 1UFM 50V -RT-	CA2,CB2
	5156109T50	CAP-EC6 1UFM 50V -RT-	CC2
	5156470T16	CAP-EC6 47UFM 16V -RT-	CD9
	5175105T16	CAP-TC 1UFM 16V CHIP 3216	CA2,CB2
	7146223456	CAP-Y5V 0.022UFZ 50V CHIP 0805	CD8
	7147104456	CAP-CC +80%-20% 0.1UF/50V CHIP	CA3,CB3,CC3,4,CD2,4,5,7,CE1,2,3,4

END

SPARE	Item Number	Description	COMMENT
S	AM67000544-V	POWER SAVING PCB ASS'Y (SUB-2)	
	2016094251	STUD M3X9	FOR POWER SAVING
	8504113006	SCREW BID(+) M3X6 MACH W/DISK	FOR POWER SAVING
	C488060047	CONN.6P & WIRE ASS'Y	FOR SK904
	4050451355	RES-CF 1/4W J 51K -AT-	R923(FOR HITACHI/TOSHIBA IC 74HC123)
	4050475455	RES-CF 1/4W J 750K -AT-	R925 (FOR HITACHI/TOSHIBA IC 74HC123)
S	4155741230	IC 74HC123	IC904
S	4159140130	IC MC14013 BCP	IC905
S	4159339000	IC LM339 16PIN	IC902,903
	4490300130	CONN. 3P WAFER 2.5MM (B3B-XH-A	SK903
	4490800130	CONN. 8P B8B-XH-A	SK902
S	4110105610	TRS. 2SB561 TO-92 -RT-	Q902
S	411030667A	TRS. 2SD667A TO-92M -RT-	Q903
S	415978L05A	IC MC78L05ACZ 3PIN	IC901
	5116102111	CAP-MC 0.001UFK 100V -RT-	C906,914
	5116103111	CAP-MC 0.01UFK 100V -RT-	C904,911
	5116104111	CAP-MC 0.1UFK 100V -RT-	C909
	5116222111	CAP-MC 0.0022UFK 100V -RT-	C905,908,910
	515X100T50	CAP-ECX 10UFM 50V -RT-	C902,903
	515X221T10	CAP-ECX 220UFM 10V -RT-	C912
	5156221T35	CAP-EC6 220UFM 35V -RT-	C901
	4050215355	RES-CF 1/2W J 15K -AT-	R926
	4050220155	RES-CF 1/2W J 200R -AT-	R937
	4050410255	RES-CF 1/4W J 1K -AT-	R901,904,928,938
	4050410355	RES-CF 1/4W J 10K -AT-	R903,910,911,912,913,934
	4050420255	RES-CF 1/4W J 2K -AT-	R929
	4050422355	RES-CF 1/4W J 22K -AT-	R905-907,909,921
	4050424255	RES-CF 1/4W J 2.4K -AT-	R920
	4050447155	RES-CF 1/4W J 470R -AT-	R935
	4050447255	RES-CF 1/4W J 4.7K -AT-	R916,927
	4050447355	RES-CF 1/4W J 47K -AT-	R902,917
	4050456355	RES-CF 1/4W J 56K -AT-	R918
	4050468155	RES-CF 1/4W J 680R -AT-	R933
	4050468255	RES-CF 1/4W J 6.8K -AT-	R908
	4050468355	RES-CF 1/4W J 68K -AT-	R914
	4050468455	RES-CF 1/4W J 680K -AT-	R919
	4050475455	RES-CF 1/4W J 750K -AT-	R915
S	4120104001	DIODE 1N4001 -AT-	D905
S	4120146060	DIODE 1N4606 (SI) -AT-	D907-919
S	4120500685	DIODE ZENER 1/2W 6.8V 500MW RD	ZD902
S	41205009C1	DIODE ZENER HZ9C1 -AT-	ZD901
S	4141099001	POWER SAVING 65X126	
	4171047256	RES-MOF 1W J 4.7K -AT-	R936
	5406100000-000	JUMP WIRE 0.6¢	J901-925,926(FOR R931)

END

SPARE	Item Number	Description	COMMENT
S	AM67000844-V	KEY SWITCH PCB ASS'Y (SUB-2)	
	C459433L10	GND WIRE ASS'Y	FOR P701 TO CHASSIS
	C488020157	CONN. 2P WIRE ASS'Y	P704
	C488040076	CONN. 4P & WIRE ASS'Y	FOR P703
	C488060042	CONN. 6P & WIRE ASS'Y	FOR P702-2
	C488080018	CONN. 8P & WIRE ASS'Y	FOR P702-1
	4082094725	RES-NET 9P J 4.7K COMMON	RN701
S	4155743740	IC 74HC374 20PIN	IC701
	4491200220	CONN. 12P 52044-1210	P701
	5101103152	CAP-CCB 0.01UFK 50V -RT-	C701
	7143104452	CAP-Z5U 0.1UFZ 50V -AT-	C703
	4050400055	RES-CF 1/4W J 0R -AT-	R714
	4050420255	RES-CF 1/4W J 2K -AT-	R709
	4050420355	RES-CF 1/4W J 20K -AT-	R701-708
S	4120141480	DIODE 1N4148 (SI) -AT-	D701-709
S	4141096102	P.C.B KEY BOARD	
	5406100000-000	JUMP WIRE 0.6¢	J701-705

END

SPARE	Item Number	Description	COMMENT
S	AM67000644-V	SUB NECK PCB ASS'Y (SUB-2)	
S	7124471133	FOCUS PACK ASS'Y	
	C459448010	GND WIRE 15KV -5-TERM	FOR H.V TO SOCKET
	C459470010	GND WIRE ASS'Y	FOR H-OUT TO SUB-NECK
S	4100226880	TRS. 2SC2688 TO-126	Q102
S	4172010056	RES-MOF 2W J 10R -AT-	R109
	4490200200	CONN. 2P WAFER E2B PH-K	P103
	4490500130	CONN. 5P WAFER 2.5MM	P102
	4490600130	CONN. 6P WAFER 2.5MM B-XH-A/P2	P101
	4570304480	SOCKET CRT 1-526-866-12	SOCKET SONY CRT
S	5029064060	VR 90MR	RCV
	5074223104	CAP-MEF 0.022UFK 400V -SF-	C105
	5092562565	CAP-PP 0.0056UFJ 630V -SF-	C111
	5103102293	CAP-CCE 1000PFM 3KV -SF-	C101,102
	5113224150	CAP-MC 0.22UFK 50V -SF-	C109
	522B1502B0	POT(CARBON) 0.1W 5K 6¢ STAND-O	VR101
	522B150200	POT(CARBON) 0.1W 5K 6¢ STAND-O	VR101
S	7050506700	FOCUS TRANSFORMER W/SHIELD	T101
S	411020945P	TRS. 2SC945P TO-92 -RT-	Q101
	5116104111	CAP-MC 0.1UFK 100V -RT-	C113,114
	5134104452	CAP-SCF 0.1UFZ 50V -RT-	C103
	5164229T50	CAP-BP 2.2UFM 50V RT 105C	C108
	4050220455	RES-CF 1/2W J 200K -AT-	R115
	4050239455	RES-CF 1/2W J 390K -AT-	R113
	4050418355	RES-CF 1/4W J 18K -AT-	R119
	4050420155	RES-CF 1/4W J 200R -AT-	R117
	4050422355	RES-CF 1/4W J 22K -AT-	R120
	4050427355	RES-CF 1/4W J 27K -AT-	R114
	4050451155	RES-CF 1/4W J 510R -AT-	R106
	4050462255	RES-CF 1/4W J 6.2K -AT-	R116
	4050462455	RES-CF 1/4W J 620K -AT-	R118
	4050468455	RES-CF 1/4W J 680K -AT-	R121
	4050482255	RES-CF 1/4W J 8.2K -AT-	R112
	4060210115	RES-CC 1/2W K 100R -AT-	R101-103
	4060210215	RES-CC 1/2W K 1K -AT-	R104
	4060210315	RES-CC 1/2W K 10K -AT-	R105
S	4120141480	DIODE 1N4148 (SI) -AT-	D103
S	4141091302	P.C.B NECK	
	4321100006	COIL PEAKING 10UH -AT-	L104
	4321158006	COIL PEAKING 0.15UH -AT-	L101,102,103
	4705415001	SURGE PROTECTOR 200V 52M -AT-	NE101,102,103
	5406100000-000	JUMP WIRE 0.6¢	J101-104

END

SPARE	Item Number	Description	COMMENT
S	AM67005044-V	MAIN PCB ASS'Y (SUB-2)	
	AM67000144-V	DEF PCB ASS'Y (SUB-2)	
	2023094660	HEAT SINK	FOR IC202
S	41591675A0	IC TDA1675A 15PIN	IC202
	8504113008	SCREW BIND(+) M3X8 MACH W/DISK	FOR IC202
	2046294000	HEAT SINK F	FOR IC201
S	4159317001	IC LM317T W/MOUNTING KIT TO-22	IC201
	8504113010	SCREW BIND(+) M3X10 MACH W/DIS	FOR IC201
	C488030172	CONN. 3P & WIRE ASS'Y	FOR P201(H.V.SYNC)
	C488040069	CONN. 4P & WIRE ASS'Y	FOR P801
	C488040073	CONN. 4P & WIRE ASS'Y	FOR P205
	C488040074	CONN. 4P & WIRE ASS'Y	FOR H-OUT
	C488040076	CONN. 4P & WIRE ASS'Y	FOR P301 (VIDEO B+)
	C488050066	CONN. 5P & WIRE ASS'Y	FOR P302(G1)
	C488060040	CONN. 6P & WIRE ASS'Y	FOR Q320
	C488110013	CONN. 11P & WIRE ASS'Y	P202
	1005083030	STAND TO-220 -SF-	FOR IC201,Q304
	3052000300	EYELET	EY01-07,09,10,12,14,16-21,23-25,27-29,31-34,36-38
S	4052043355	RES-CF 2W J 43K -AT-	R349
S	4100226880	TRS. 2SC2688 TO-126	Q329
S	410030669A	TRS. 2SD669A TO-126	Q318
S	4103200122	TRS. TIP 122	Q332
S	4103200127	TRS. TIP127 TO-220	Q331
S	410584552B	TRS. BUK 455-200B TO-220	Q315,317
S	4105906200	TRS. MOSFET IRF620 TO-220	Q304
S	4105906400	TRS. IRF640 TO-220	Q315,317
S	4141095500	P.C.B. I2C	
S	4159173580	IC HA17358 8PIN	IC203,204
S	4159358000	IC LM358 8PIN	IC203,204
	4171075856	RES-MOF 1W J 0.75R -AT-	R241
S	4172010156	RES-MOF 2W J 100R -AT-	R247
S	4172010356	RES-MOF 2W J 10K -AT-	R329,331
S	4172012156	RES-MOF 2W J 120R -AT-	R335-337
S	4172024956	RES-MOF 2W J 2.4R -AT-	R242
S	4177312153	RES-MOF 3W J 120R -SF- SMALL	R373,391
	4323600003	COIL CHOKE 60UH -SF-	L306
	4323900103	COIL CHOKE 90UH -SF-	L307
	4325141003	COIL CHOKE 146UH -SF-	L304
	4325339003	COIL CHOKE 3.3MH -SF-	L305
	4420412002	RELAY 12V	RL102
	4490400207	CONN. 4P WAFER ROUND PIN	P305
	4490400260	CONN. 4PIN WAFER 2.0MM 173981-	P203,204,304
	5074103102	CAP-MEF 0.01UFK 250V -SF-	C225
	5074224102	CAP-MEF 0.22UFK 250V -SF-	C354
	5074335102	CAP-MEF 3.3UFK 250V -SF-	C334
	5074475101	CAP-MEF 4.7UFK 100V -SF-	C325
	5084104510	CAP-MPC 0.1UFJ 100V -SF-	C209,210
	5084104563	CAP-MPC 0.1UFJ 63V -SF-	C209,210
	5103103452	CAP-CCE 0.01UFZ 50V -RT-	C699
	5104104443	CAP-CCF +80%-20% 0.1UF/500V -S	C340
	5113154150	CAP-MC 0.15UFK 50V -SF-	C211
	5113224550	CAP-MC 0.22UFJ 50V -SF-	C208
	515F471S35	CAP-ECF 470UFM 35V -SF-	C335,336
	515X221S35	CAP-ECX 220UFM 35V -SF-	C220
	515X471S16	CAP-ECX 470UFM 16V -SF-	C212
	5156100S03	CAP-EC6 10UFM 250V -SF-	C338
	5156101S07	CAP-EC6 100UFM 200V -SF-	C333
	5156102S35	CAP-EC6 1000UFM 35V -SF-	C216
	5156222S25	CAP-EC6 2200UFM 25V -SF-	C213
	5190105583	CAP-MPP 1.0UFJ 250V	C314
	5190224543	CAP-MPP 0.22UFJ 400V -SF-	C316
	5190754583	CAP-MPP 0.75UFJ 250V -SF-	C315
	5195394543	CAP-PMHA 0.39UFJ 400V -SF-	C313
	522B110480	POT(CARBON) 0.1W 100K 6¢ STAND	VR304
	522B110400	POT(CARBON) 0.1W 100K 6¢ STAND	VR304
	5221125450	POT(CERMET) 0.5W 250K 8¢ STAND	VR305
	5225110310	POT(CERMET) 0.3W 10K 6¢ LAY-DO	VR303
	5228150310	POT(CARBON) 0.1W 50K 6¢ LAY-DO	VR201
	5322133000	WIRE UL1007 #22 ORG 290-K-K	6.3V-D207
	5322191500	WIRE UL1007 #22 WHT 140-K-K	FOR LCH3A-LCH3A' X1,R-R' X1
	5322233714	WIRE UL1015 #22 ORG 360-TERM	FOR 300V
	5322243114	WIRE UL1015 #22 YEL 300-TERM	HCS2
	5322253114	WIRE UL1015 #22 GRN 300-TERM	HCS1
	5324213004	WIRE 1007 #24 BRN 295-TER.1.2¢	FOR FB-FB',VS-VS'
S	7050306700	F.B.T.	T302

	7050904660	O/P TRANSFORMER	T303
	708S206700	COIL LINEARITY	L303
S	410001376A	TRS. 2SA1376A	Q330
S	4110007330	TRS. 2SA733 TO-92M -RT-	Q305,327,333
S	4110013710	TRS. 2SA1371E TO-92	Q330
S	411010647A	TRS. 2SB647A(C) -RT-	Q204,207,308,319
S	4110113630	TRS. 2SB1363 TO-92 -RT-	Q330
S	411020945P	TRS. 2SC945P TO-92 -RT-	Q206,306
S	4110226550	TRS. 2SC2655 TO-92M -RT-	Q301
S	411030667A	TRS. 2SD667A TO-92M -RT-	Q203,205
S	4116610010	TRS. RN1001 -RT-	Q324-326
S	4116612030	TRS. RN1203 -RT-	Q311,316,321-323,328,340
	5101103152	CAP-CCB 0.01UFK 50V -RT-	C218
	5101471132	CAP-CCB 470PFK 1KV -RT-	C324
	5101681132	CAP-CCB 680PFK 1KV -RT-	C310
	5116103111	CAP-MC 0.01UFK 100V -RT-	C301,306,317,3A4
	5116104111	CAP-MC 0.1UFK 100V -RT-	C206,302,318,320,323
	5116153111	CAP-MC 0.015UFK 100V -RT-	C358,359
	5116222111	CAP-MC 0.0022UFK 100V -RT-	C3A2
	5116563150	CAP-MC 0.056UFK 50V -RT-	C207
	5128101552	CAP-CCSL 100PFJ 50V -RT-	C229
	5134104452	CAP-SCF 0.1UFZ 50V -RT-	C215,222,329,341
	515X100S02	CAP-ECX 10UFM 160V -SF-	C337
	515X101T50	CAP-ECX 100UFM 50V -RT-	C321,342
	515X109T50	CAP-ECX 1UFM 50V -RT-	C328
	515X229T50	CAP-ECX 2.2UFM 50V -RT-	C327,360
	515X339T50	CAP-ECX 3.3UFM 50V -RT-	C224
	5156101T10	CAP-EC6 100UFM 10V -RT-	C221
	5156101T16	CAP-EC6 100UFM 16V -RT-	C303,330,331
	5156109T50	CAP-EC6 1UFM 50V -RT-	C214,304,326
	5156229T50	CAP-EC6 2.2UFM 50V -RT-	C217,339
	5156339T50	CAP-EC6 3.3UFM 50V -RT-	C226
	5156470T16	CAP-EC6 47UFM 16V -RT-	C332
	5156470T50	CAP-EC6 47UFM 50V -RT-	C219
	4050133955	RES-CF 1/2W J 3.3R -AT- SMALL	R3A8,3A9
	4050227155	RES-CF 1/2W J 270R -AT-	R240
	4050282155	RES-CF 1/2W J 820R -AT-	R355,357
	4050410055	RES-CF 1/4W J 10R -AT-	R211,212
	4050410155	RES-CF 1/4W J 100R -AT-	R253
	4050410255	RES-CF 1/4W J 1K -AT-	R244,249,251,306,307,308,372,374,3B1
	4050410355	RES-CF 1/4W J 10K -AT-	R310,3A3,3A4
S	4050410555	RES-CF 1/4W J 1M -AT-	R3B2
	4050412255	RES-CF 1/4W J 1.2K -AT-	R309
S	4050412555	RES-CF 1/4W J 1.2M -AT-	R392
	4050413355	RES-CF 1/4W J 13K -AT-	R226,366
	4050415355	RES-CF 1/4W J 15K -AT-	R266,365
	4050418155	RES-CF 1/4W J 180R -AT-	R238
	4050418255	RES-CF 1/4W J 1.8K -AT-	R245,3A2
	4050418355	RES-CF 1/4W J 18K -AT-	R246,278
	4050420155	RES-CF 1/4W J 200R -AT-	R200
	4050420255	RES-CF 1/4W J 2K -AT-	R248,313
	4050420355	RES-CF 1/4W J 20K -AT-	R301,363
	4050422055	RES-CF 1/4W J 22R -AT-	R311
	4050422255	RES-CF 1/4W J 2.2K -AT-	R237,371
	4050422455	RES-CF 1/4W J 220K -AT-	R370
S	4050422555	RES-CF 1/4W J 2.2M -AT-	R367,382
	4050427355	RES-CF 1/4W J 27K -AT-	R358
	4050430255	RES-CF 1/4W J 3K -AT-	R361
	4050433155	RES-CF 1/4W J 330R -AT-	R228
	4050433355	RES-CF 1/4W J 33K -AT-	R231
	4050433955	RES-CF 1/4W J 3.3R -AT-	R236
	4050436355	RES-CF 1/4W J 36K -AT-	R3A5,359
	4050439255	RES-CF 1/4W J 3.9K -AT-	R250,3A6
	4050439355	RES-CF 1/4W J 39K -AT-	R277
	4050443255	RES-CF 1/4W J 4.3K -AT-	R239
	4050447055	RES-CF 1/4W J 47R -AT-	R318
	4050447155	RES-CF 1/4W J 470R -AT-	R260
	4050447255	RES-CF 1/4W J 4.7K -AT-	R213-218,229,252,340,341,3A1
	4050447355	RES-CF 1/4W J 47K -AT-	R232
	4050451255	RES-CF 1/4W J 5.1K -AT-	R360
	4050456255	RES-CF 1/4W J 5.6K -AT-	R230
	4050456455	RES-CF 1/4W J 560K -AT-	R332,334
	4050468255	RES-CF 1/4W J 6.8K -AT-	R369
	4050475255	RES-CF 1/4W J 7.5K -AT-	R364
	4050482255	RES-CF 1/4W J 8.2K -AT-	R243
	4050491355	RES-CF 1/4W J 91K -AT-	R368
S	4070410555	RES-MF 1/4W J 1M -AT-	R300
S	4120104002	DIODE 1N4002 -AT-	D212,345
S	4120141480	DIODE 1N4148 (SI) -AT-	D205-208,213,215,310,327-332,335,340,342-344
S	4120500152	DIODE ZENER 14.5-15.1V -AT-	D321,322,325,326

S	41205004A2	DIODE ZENER HZ4A2 -AT-	D211,214,312
S	4120500561	DIODE ZENER RD5.1EB2 1/2W -AT-	D220
S	41205009C1	DIODE ZENER HZ9C1 -AT-	D301
S	4120552798	DIODE ZENER 1N5279BRL	D333
S	413010010D	DIODE RGP10D-5302 -AT- 1A	D311,341
S	413010010J	DIODE RGP10J-5390 1A 600V -AT-	D308,309,315,334
S	413010010M	DIODE RGP10M-5311 -AT-	D316
S	413016436A	DIODE BYV36A -AT-	D313,314
S	4141101006	P.C.B MAIN 300X300	
S	4141102101	P.C.B. H-OUT 180X40M/M	
	4171018156	RES-MOF 1W J 180R -AT-	R324
	4171033056	RES-MOF 1W J 33R -AT-	R320
	4171033256	RES-MOF 1W J 3.3K -AT-	R327
	4171039156	RES-MOF 1W J 390R -AT-	R356
	4256041001	RES-PR MF 1/4W F 1K -AT-	R221,222
	4256041002	RES-PR MF 1/4W F 10K -AT-	R225,326,346
	4256041101	RES-PR MF 1/4W F 1.1K -AT-	R350
	4256041302	RES-PR MF 1/4W F 13K -AT-	R315,347
	4256041602	RES-PR MF 1/4W F 16K -AT-	R325
	4256042002	RES-PR MF 1/4W F 20K -AT-	R353,375
	4256042201	RES-PR MF 1/4W F 2.2K -AT-	R312
	4256042801	RES-PR MF 1/4W F 2.8K -AT-	R259
	4256043401	RES-PR MF 1/4W F 3.4K -AT-	R348,352
	4256043403	RES-PR MF 1/4W F 340K -AT-	R234
	4256043652	RES-PR MF 1/4W F 36.5K -AT-	R224
	4256044532	RES-PR MF 1/4W F 45.3K -AT-	R220
	4256045622	RES-PR MF 1/4W F 56.2K -AT-	R223
	4256045761	RES-PR MF 1/4W F 5.76K -AT-	R351
	4256046042	RES-PR MF 1/4W F 60.4K -AT-	R219
	4256046202	RES-PR MF 1/4W F 62K -AT-	R235
	4256049530	RES-PR MF 1/4W F 953R -AT-	R258
	5406100000-000	JUMP WIRE 0.6¢	J201-209,211-215,217,218,220-222,224-258,260-268 J270,272-281,283-289,291-294,297

	AM67000344-V	SPS PCB ASS'Y (SUB-2)	
	2004191630	HEAT SINK HOLDER	FOR Q1
	2008094660	HEAT SINK	FOR Q1
S	4101515730	TRS. MOSFET 2SK1573 TO-3P	Q1
	5510135300	TUBE SILICON RUBBER 45T-13.5¢-	FOR Q1
	8283113015	SCREW BIND(+) M3X15 MACH W/SPR	FOR Q1
	2001291780	HEAT SINK	Q11
	3011100030	NUT ISO HEX M3 Z1NC	FOR Q11
S	4101509470	TRS. MOSFET 2SK947 TO-220	FOR Q11
	8504113010	SCREW BIND(+) M3X10 MACH W/DIS	FOR Q11
	2001291780	HEAT SINK	D21
	3011100030	NUT ISO HEX M3 Z1NC	FOR D21
S	410584551A	TRS. MOSFET BUK455-100A TO-22	Q15
S	4130505400	DIODE D5LC40 ITO-220	D21
	8504113012	SCREW BIND(+) M3X12 MACH W/DIS	FOR Q21,D15
	2007094660	HEAT SINK	FOR D30
S	41303031F4	DIODE 3A/400V 35NS 31DF4 -AT-	D30
	2007891030	HEAT SINK	FOR IC6
	3011100030	NUT ISO HEX M3 Z1NC	FOR IC6
S	4159317001	IC LM317T W/MOUNTING KIT TO-22	IC6
	8504113008	SCREW BIND(+) M3X8 MACH W/DISK	FOR IC6
	2046294000	HEAT SINK F	FOR Q7
S	4101164050	TRS. 2N6405 TO-220 16A/800V SC	Q7
	8504113008	SCREW BIND(+) M3X8 MACH W/DISK	FOR Q7
	2013094660	HEAT SINK	DB1
S	413050S860	DIODE D5SB60 5A/600V	DB1
	8504113008	SCREW BIND(+) M3X8 MACH W/DISK	FOR DB1
	C459426010	GND WIRE ASS'Y #18 GRN 180MM	FOR GND WIRE
	C488080023	CONN. 8P & WIRE ASS'Y	FOR SK902
	1005083030	STAND TO-220 -SF-	Q7
S	4072033855	RES-MF 2W J 0.33R -AT-	R6
S	4095022158	RES-WW 5W J 220R SQY	R5
S	4095027358	RES-WW 5W J 27K SQY	R43
S	4095030254	RES-WW 5W J 3K SQM-NORMAL	R44
S	4097010354	RES-WW 7W J 10K SQM-NORMAL	R7
S	4097015051	RES-WW 7W J 15R SQM-SF	R2
S	410030669A	TRS. 2SD669A TO-126	Q2
S	41303031F2	DIODE 3A/200V 31DF2	D22,23
S	41303031F4	DIODE 3A/400V 35NS 31DF4 -AT-	D20
S	4130304311	DIODE 31DF1 -AT-	D24
S	4159384200	IC UC3842A 8PIN	IC1
	4159435002	POTO COUPLER X'STER 4N35 W=10	PH1
S	4159523800	IC M5238AP	IC4
S	4172020956	RES-MOF 2W J 2R -AT-	R87
	4320361003	COIL CHOKE 360UH -SF-	L1

	4420512004	RELAY DC12V	RELAY
	4490200130	CONN. 2P WAFER 2.5MM	SK4
	4490200207	CONN. 2P WAFER ROUND PIN 10MM	SK3
	4490300190	CONN. 3.96 3P W/O PIN 2 -SF-	SK1
S	4692300001	CLIP-FUSE 5MM	FOR F1
	5061103440	CAP-CCS 0.01UFM 400V -SF-	C5,6
	5065105425	CAP-MPR 1UFM 250V -SF-	C1
	5065474425	CAP-MPR 0.47UFM 250V -SF-	C2
	5074104101	CAP-MEF 0.1UFK 100V -SF-	C11
	5074104104	CAP-MEF 0.1UFK 400V -SF-	C22,43
	5074224101	CAP-MEF 0.22UFK 100V -SF-	C48,49
	5101471193	CAP-CCB 470PFK 3KV -SF-	C9
	515A331S50	CAP-EC +-20% 330UF/50V -SF-	C32
	515A470S02	CAP-EC +-20% 47UF/160V -SF-	C30
	515A471S35	CAP-EC +-20% 470UF/35V -SF-	C8
	515F101S01	CAP-ECF 100UFM 100V -SF-	C91
	515F331S01	CAP-ECF 330UFM 100V -SF-	C31
	515F471S25	CAP-ECF 470UFM 25V -SF-	C33,34
	515L331S04	CAP-ECL 330UFM 400V -SF-	C7
	515X221S07	CAP-ECX 220UFM 200V -SF-	C47
	515X331S50	CAP-ECX 330UFM 50V -SF-	C32
	515X471S35	CAP-ECX 470UFM 35V -SF-	C8
	5225150210	POT(CERMET) 0.3W 5K 6¢ LAY-DOW	VR1
S	5268400052	FUSE 4A/250VAC	F1
	7021176710	PTCR 15R 903P54E150MR17-D	PTCR1
	7050106700	POWER TRANSFORMER	T2
	7066330253	CHOKE COMMON MODE	T1
	7110680018	VARISTOR ERZC20DK680U	VDR1
S	410112907A	TRS. 2N2907A	Q18
S	4110105610	TRS. 2SB561 TO-92 -RT-	Q3,6
S	411022120Y	TRS. 2SC2120Y TO-92 -RT-	Q5,20
S	4114422220	TRS. PH2222 TO-92 -RT-	Q17
S	411442907A	TRS. PH2907A TO-92 -RT-	Q18
S	4114501006	TRS. MCR100-6 TO-92 -RT-	Q4
S	4114510080	TRS. SCR MCR100-8 TO-92 -RT-	Q19
S	415943100A	IC TL431 REGULATOR TO-92 -RT-	IC3
	5074472505	CAP-MEF 0.0047UFJ 50V -SF-	C13
	5101102132	CAP-CCB 1000PFK 1KV -RT-	C38
	5101102152	CAP-CCB 1000PFK 50V -RT-	C17
	5101121152	CAP-CCB 120PFK 50V -RT-	C10,14
	5101331152	CAP-CCB 330PFK 50V -RT-	C50
	5101681152	CAP-CCB 680PFK 50V -RT-	C51
	5116332111	CAP-MC 0.0033UFK 100V -RT-	C46
	5116472111	CAP-MC 0.0047UFK 100V -RT-	C15
	5134104452	CAP-SCF 0.1UFZ 50V -RT-	C37
	515A100T01	CAP-EC +-20% 10UF/100V -RT-	C20
	515A100T25	CAP-EC +-20% 10UF/25V -RT-	C45
	515A101T10	CAP-EC +-20% 100UF/10V -RT-	C16
	515A339T50	CAP-EC +-20% 3.3UF/50V -RT-	C3
	515A470T10	CAP-EC +-20% 47UF/10V -RT-	C12
	515X100T01	CAP-ECX 10UFM 100V -RT-	C20
	515X100T25	CAP-ECX 10UFM 25V -RT-	C45
	515X100T50	CAP-ECX 10UFM 50V -RT-	C19
	515X101T10	CAP-ECX 100UFM 10V -RT-	C16
	515X339T50	CAP-ECX 3.3UFM 50V -RT-	C53
	515X470T10	CAP-ECX 47UFM 10V -RT-	C12
	5156101T25	CAP-EC6 100UFM 25V -RT-	C21
	5156479T50	CAP-EC6 4.7UFM 50V -RT-	C18
	4050151055	RES-CF 1/2W J 51R -AT- SMALL	R47
	4050247455	RES-CF 1/2W J 470K -AT-	R1
	4050410155	RES-CF 1/4W J 100R -AT-	R21,25,37,38
	4050410255	RES-CF 1/4W J 1K -AT-	R20,48,57,66,70,78
	4050410355	RES-CF 1/4W J 10K -AT-	R27,31,85
	4050410455	RES-CF 1/4W J 100K -AT-	R36
S	4050410555	RES-CF 1/4W J 1M -AT-	R65
S	4050410555	RES-CF 1/4W J 1M -AT-	R97
	4050412155	RES-CF 1/4W J 120R -AT-	R24
	4050415355	RES-CF 1/4W J 15K -AT-	R26,29,46
	4050418055	RES-CF 1/4W J 18R -AT-	R9
	4050420155	RES-CF 1/4W J 200R -AT-	R23,79
	4050420255	RES-CF 1/4W J 2K -AT-	R10,33
	4050420355	RES-CF 1/4W J 20K -AT-	R15
	4050422255	RES-CF 1/4W J 2.2K -AT-	R68
	4050424355	RES-CF 1/4W J 24K -AT-	R45,76
	4050427255	RES-CF 1/4W J 2.7K -AT-	R13
	4050430055	RES-CF 1/4W J 30R -AT-	R35
	4050430255	RES-CF 1/4W J 3K -AT-	R30,34,69,71,96
	4050430355	RES-CF 1/4W J 30K -AT-	R62
	4050433455	RES-CF 1/4W J 330K -AT-	R84
	4050436055	RES-CF 1/4W J 36R -AT-	R8

	4050436355	RES-CF 1/4W J 36K -AT-	R95
	4050439355	RES-CF 1/4W J 39K -AT-	R92
	4050447155	RES-CF 1/4W J 470R -AT-	R77
	4050447255	RES-CF 1/4W J 4.7K -AT-	R67
	4050447355	RES-CF 1/4W J 47K -AT-	R75
	4050451055	RES-CF 1/4W J 51R -AT-	R11
	4050451255	RES-CF 1/4W J 5.1K -AT-	R18,19
	4050456455	RES-CF 1/4W J 560K -AT-	R39,40
	4050456455	RES-CF 1/4W J 560K -AT-	R97
	4050462155	RES-CF 1/4W J 620R -AT-	R49
	4050462955	RES-CF 1/4W J 6.2R -AT-	R12
	4050475155	RES-CF 1/4W J 750R -AT-	R41
	4050482255	RES-CF 1/4W J 8.2K -AT-	R28
	4050482455	RES-CF 1/4W J 820K -AT-	R82
	4050491255	RES-CF 1/4W J 9.1K -AT-	R32
	4051047455	RES-CF 1W J 470K -AT-	R4
	4071022855	RES-MF 1W J 0.22R -AT-	R3,56
S	4120104001	DIODE 1N4001 -AT-	D4,29
S	4120146060	DIODE 1N4606 (SI) -AT-	D5-9,11-13,16,17,19,31
S	4120500162	DIODE ZENER 16V HZ-16-2 -AT-	Z1,5
S	41205005C1	DIODE ZENER HZ5C1 5.1V -AT-	Z6
S	4120501802	DIODE ZENER HZ18-2 V -AT-	Z2,3
S	4120552798	DIODE ZENER 1N5279BRL	Z4
S	413010001B	DIODE FE1B-5390 1A 100V -AT-	D15
S	413010001D	DIODE FE1D-5390	D2,3
S	413010001D	DIODE FE1D-5390	D34
S	4130101102	DIODE 11DF2 -AT-	D2,3
S	4130101102	DIODE 11DF2 -AT-	D34
S	413010426C	DIODE BYV26C KINK FORMING -AT-	D25
S	413010426D	DIODE 1A/800V BYV26D	D1,28
S	413020110D	DIODE EGP10D -AT-	D2,3
S	4141094501	P.C.B. DC-DC CONVERTER	
S	4160447555	RES-MG 1/4W J 4.7M -AT-	R14
	4171010056	RES-MOF 1W J 10R -AT-	R81
	4256041101	RES-PR MF 1/4W F 1.1K -AT-	R94
	4256041132	RES-PR MF 1/4W F 11.3K -AT-	R16
	4256041913	RES-PR MF 1/4W F 191K -AT-	R72
	4256043301	RES-PR MF 1/4W F 3.3K -AT-	R74
	4256044322	RES-PR MF 1/4W F 43.2K -AT-	R73
	4256049091	RES-PR MF 1/4W F 9.09K -AT-	R86
	4321150006	COIL PEAKING 15UH -AT-	L3
	4322209046	FERRITE BEAD 2UH -AT-	L2
	5406100000-000	JUMP WIRE 0.6¢	J1-25,27-36,38,40

END

SPARE	Item Number	Description	COMMENT
S	SS67001330-404	LOGIC PCB ASS'Y	
	4010100052	RES-CHIP 1/10W J OR 0805	R801-808
	4010120252	RES-CHIP 1/10W J 2K 0805	R830
	4010120352	RES-CHIP 1/10W J 20K 0805	R832
	4010124252	RES-CHIP 1/10W J 2.4K 0805	R824
	4010139252	RES-CHIP 1/10W J 3.9K 0805	R820,831
	4010147152	RES-CHIP 1/10W J 470R 0805	R818,819
	4050400055	RES-CF 1/4W J OR -AT-	L801,R821
S	414108800N	P.C.B. DMC1000 (47X67)	
S	4159100001	IC DMC 1000 PLCC REV:G	IC801
S	4159241600	IC 24C16 (SOIC) 8PIN	IC802
S	4159241640	IC X24164 (SOIC) 8PIN	IC803
	4159670050	FIRMWARE . GR5 REV:5.0	
	4321109006	COIL PEAKING 1UH -AT-	L803
	4490400130	CONN. 4P WAFER (BXB-XH-A) P221	CN803
	4490600130	CONN. 6P WAFER 2.5MM B-XH-A/P2	CNP801
	4490800130	CONN. 8P B8B-XH-A	CNP802
	5121101552	CAP-CCCH 100PFJ 50V -RT-	C819
	5156101T10	CAP-EC6 100UFM 10V -RT-	C812
	5156470T16	CAP-EC6 47UFM 16V -RT-	C815
	5176229L16	CAP-TC 2.2UFK 16V CHIP 3528	C801
	7145102456	CAP-X7R 0.001UFZ 50V CHIP 1206	C809
	7145473156	CAP-X7R 0.047UFK 50V CHIP 1206	C804
	7147104456	CAP-CC +80%-20% 0.1UF/50V CHIP	C803,805-807
	7154000000	CRYSTAL 4.00MHZ	RC801
	7185101116	CAP-CC +-10% 100PF/100 CHIP	C816,817

END

SPARE	Item Number	Description	COMMENT
S	AM67000944-V	H-PRO DAUGHTER PCB ASS'Y (SUB-	
	4490500203	CONN. 5P R/A WAFER HB02051	
S	411020945P	TRS. 2SC945P TO-92 -RT-	Q335
	5156101T16	CAP-EC6 100UFM 16V -RT-	C352
	4050410255	RES-CF 1/4W J 1K -AT-	R379
	4050415155	RES-CF 1/4W J 150R -AT-	R388
	4050447255	RES-CF 1/4W J 4.7K -AT-	R387
S	4120141480	DIODE 1N4148 (SI) -AT-	D338,339,347
S	41205009C1	DIODE ZENER HZ9C1 -AT-	D346
S	4141103100	P.C.B DELAY 26X27	

END

SPARE	Item Number	Description	COMMENT
S	AM67000442-V	DAUGHTER-1 PCB ASS'Y (SUB-1)	
S	4159393000	IC LM 393 14PIN	IC2
	4491500203	CONN. 15P HB02151 R/A	SK5
S	4110007330	TRS. 2SA733 TO-92M -RT-	Q14
S	4110105610	TRS. 2SB561 TO-92 -RT-	Q12,13
S	411020945P	TRS. 2SC945P TO-92 -RT-	Q8
S	411021515K	TRS. 2SC1515K TO-92 -RT-	Q16
S	411022120Y	TRS. 2SC2120Y TO-92 -RT-	Q9
S	415978L05A	IC MC78L05ACZ 3PIN	IC5
	5101102152	CAP-CCB 1000PFK 50V -RT-	C52
	5101681152	CAP-CCB 680PFK 50V -RT-	C35
	5116102111	CAP-MC 0.001UFK 100V -RT-	C44
	5116222111	CAP-MC 0.0022UFK 100V -RT-	C40
	5116682111	CAP-MC 6800PFK 100V -RT-	C42
	5116683150	CAP-MC 0.068UFK 50V -RT-	C41
	515X100T50	CAP-ECX 10UFM 50V -RT-	C36,39
	5156220T25	CAP-EC6 22UFM 25V -RT-	C90
	4050410255	RES-CF 1/4W J 1K -AT-	R53,88
	4050410355	RES-CF 1/4W J 10K -AT-	R58,60,90,91
	4050415055	RES-CF 1/4W J 15R -AT-	R61
	4050415155	RES-CF 1/4W J 150R -AT-	R59,64
	4050415355	RES-CF 1/4W J 15K -AT-	R52
	4050422255	RES-CF 1/4W J 2.2K -AT-	R89
	4050424255	RES-CF 1/4W J 2.4K -AT-	R51
	4050430055	RES-CF 1/4W J 30R -AT-	R54
	4050430255	RES-CF 1/4W J 3K -AT-	R55
	4050430455	RES-CF 1/4W J 300K -AT-	R93
	4050447255	RES-CF 1/4W J 4.7K -AT-	R63
	4050447355	RES-CF 1/4W J 47K -AT-	R50 (FOR IC2 LM393 NEC/SGS)
S	4120146060	DIODE 1N4606 (SI) -AT-	D26
	5406100000-000	JUMP WIRE 0.6¢	J90,91,93

END

SPARE	Item Number	Description	COMMENT
S	AM67000742-V	TRS. PCB ASS'Y (SUB-1)	
	2007891030	HEAT SINK	FOR D303
S	4130303410	DIODE 3TH41 (CAP)	D303
	3340230165	BEAD PIN 16.5X2.3¢	P308
	4171024156	RES-MOF 1W J 240R -AT-	R314
S	4172010356	RES-MOF 2W J 10K -AT-	R328
S	4172022956	RES-MOF 2W J 2.2R -AT-	R319,390
S	4172075856	RES-MOF 2W J 0.75R -AT-	R316
	4323529003	COIL CHOKE 5.2UH -SF-	L302
	4490400207	CONN. 4P WAFER ROUND PIN	P309
	4490600034	CONN. 6P 5273-06 OR 3060-06	P307
	5113224150	CAP-MC 0.22UFK 50V -SF-	C305
	5190333553	CAP-MPP 0.033UFJ 1500V -SF-	C308
	51907525A3	CAP-MPP 0.0075UFJ 2KV -SF-	C309
	5195123573	CAP-PMHA 0.012UFJ 1.6KV -SF-	C307
	7050206330	DRIVER TRANSFORMER	T301
S	4120500152	DIODE ZENER 14.5-15.1V -AT-	D319,320
S	413010010J	DIODE RGP10J-5390 1A 600V -AT-	D307
S	413020120A	DIODE EGP-20A -AT-	D302
	4256042002	RES-PR MF 1/4W F 20K -AT-	R381
	5406100000-000	JUMP WIRE 0.6¢	J301-304

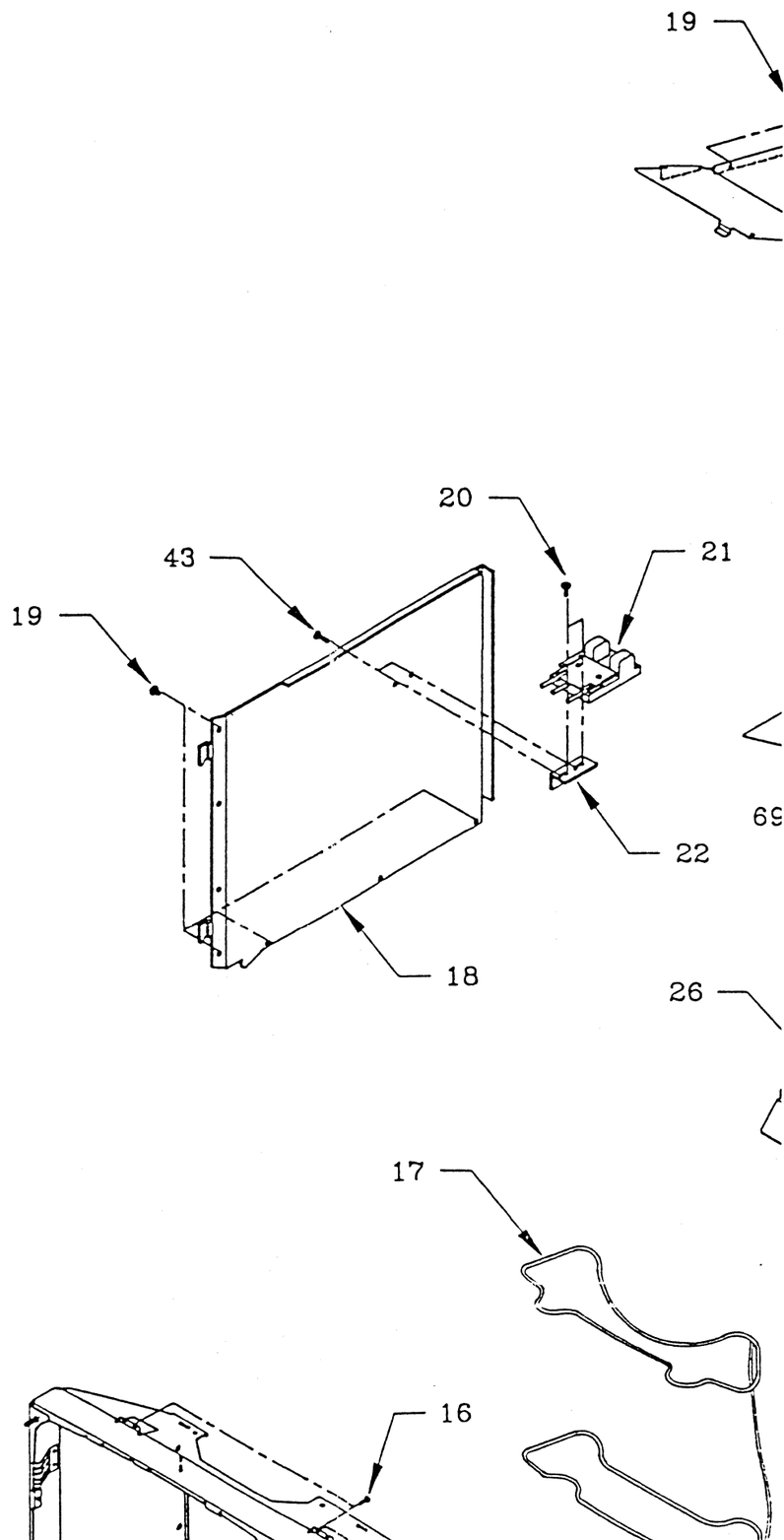
END

Cabinet and Main Parts List

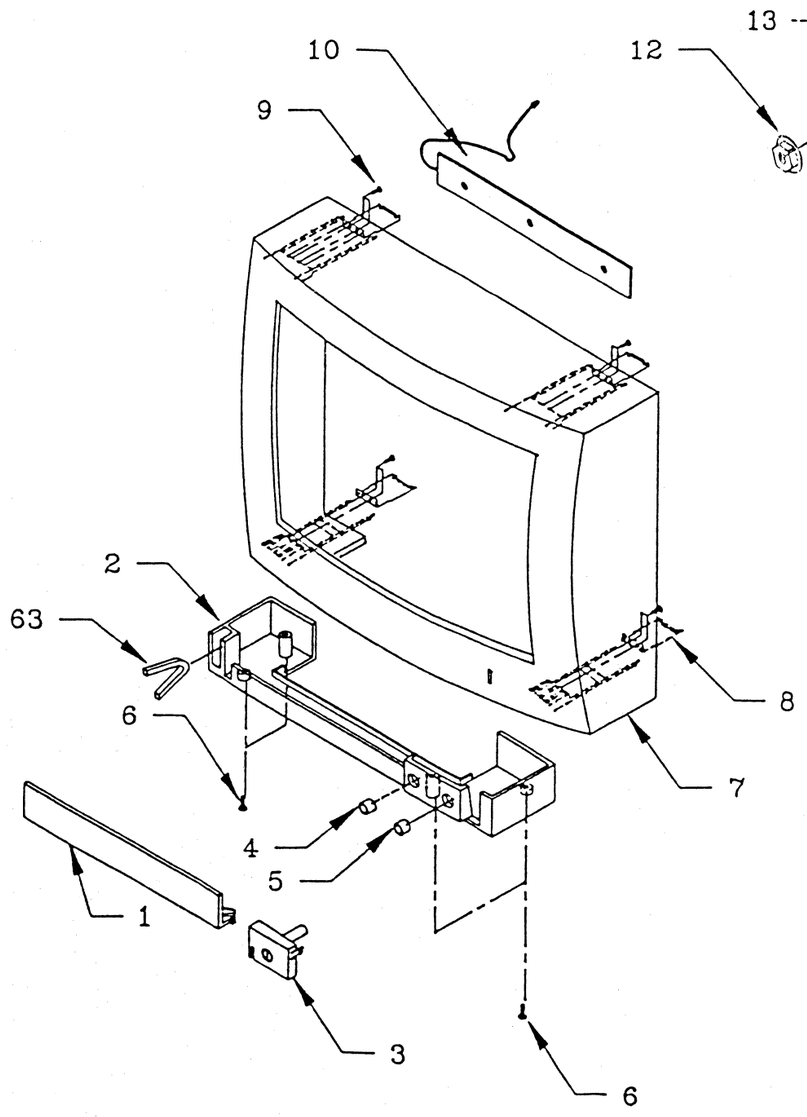
DEC/07/'93

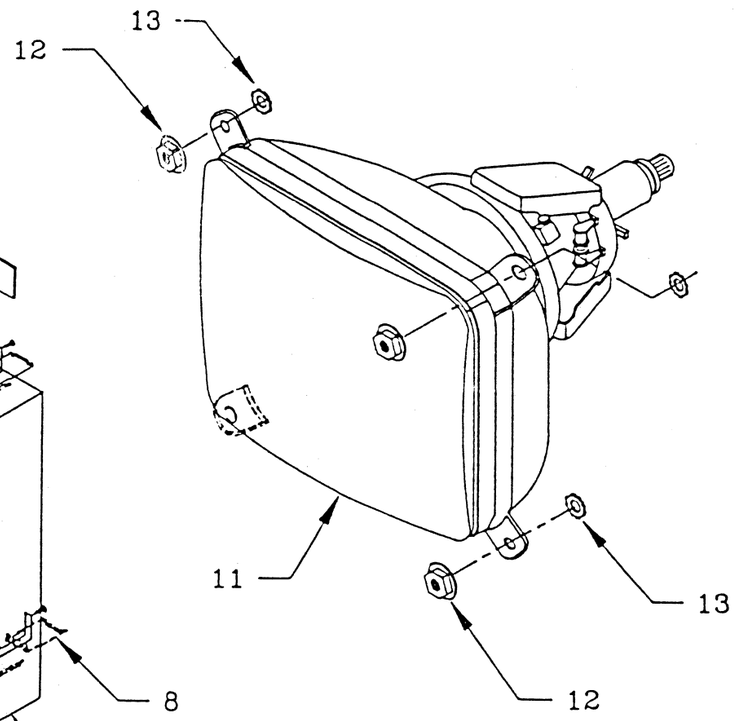
SPARE	Item Number	INDEX	Description	COMMENT
	1002096330	1	CONTROL DOOR	
	1001196330	2	CONTROL BOX	
	1003096330	3	KNOB PUSH	
	1015194238	4	KNOB VR B	
	1013194238	5	KNOV VR A	
	8504113008	6	SCREW BIND(+) M3X8 MACH W/DISK	FOR VR BKT & UPPER BKT X2,CONTROL BOX & LOWER BKT X4,MAIN PCB X6
S	1016096710	7	BEZEL ASS'Y	BEZEL(1001096710) & LEN LENS ASS'Y(1004098720)
	2008094251	8	BKT BEZEL	
	8026113012	9	SCREW BIND(+) ZN3C M3X12 SELF	BZL BKT & BZL X8
	4410501120	10	KEYPAD MENBRANE 921601	
S	7010021717	11	CRT 17FQ2-D2	
	3051100050	12	NUT ZINC CHROMATE M5	FOR CRT & CRT FRAME X4
	2018094140	13	TOOTHED LOCK WASHER	FOR CRT & CRT FRAME X4
	C001111052	14	BRAID WIRE ASS'Y	
	2001294480	15	CRT FRAME	
	8504113010	16	SCREW BIND(+) M3X10 MACH W/DIS	FOR CRT FRAME & BEZEL BKT X4
	7020176710	17	DEGAUSSING COIL	FOR CRT
	2012096710	18	CHASSIS L	
	8127113006	19	SCREW PAN(+)/HD CAP TAPPING M3	FOR CHAS R & CRT FRAME X2,CHAS L & CRT FRAME X2,
	8127113006	19	SCREW PAN(+)/HD CAP TAPPING M3	FOR CHAS TOP & CHAS R X2,CHAS TOP & CHAS L X2,CHAS TOP & CHAS REAR X2 CHAS BTM & CRT FRAME X2,CHAS BTM & CHAS R X2,CHAS BTM & CHAS L X2,CHAS REAR & CHAS R X2,CHAS REAR & CHAS L X2,CHAS REAR & CHAS BTM X2,UPPER BKT & STAN D X4,LOWER BKT & UPPER BKT X4
	8026113008	20	SCREW BID(+) ZINC M3X8 TAPPING	FOR FOCUS PAD & BKT X2,STAND & CRT FRAME X2
S	7124471133	21	FOCUS ASS'Y	
	2017096330	22	FOCUS BKT A	
S	AM67005044-V	23	MAIN PCB ASS'Y (SUB-2)	
	2004494251	24	CHASSIS TOP	
S	AM67000644-V	25	SUB NECK PCB ASS'Y	
	2024094660	26	CHASSIS (BTM)	
	1023094000	27	BUSHING SNAP	FOR CHAS BOTTOM
	3060040060	28	RIVET NYLON 4.0X6.0	FOR TRANSISTOR PCB
S	SS67000120-404	29	KEY SWITCH PCB ASS'Y	
S	----------	30	IIC PCB ASS'Y	
	1013094180	31	REVLT €3	FOR I2C OCB
	9008096700	32	DECO SHEET (L)	
	9007096700	33	DECO SHEET (R)	
	1006096330	34	SNAP BUSHINGS (NB1722)	FOR STAND
S	C710671110	35	I/O CABLE ASS'Y	
	9004096320	36	COVER I2C	
	8002113012	37	SCREW FLATE HD(+) M3X12	FOR AC SOCKET
S	7066700129	38	LINE FILTER	FILTER
	9006096700	39	DECO PLATE (I/O CABLE)	
	3211300000	40	WASHER SPRING M3 5.2€X3.2€X0.8	FOR AC SOCKET
	3011100030	41	NUT ISO HEX M3 Z1NC	FOR AC SOCKET
	2004096700	42	BKT LOWER	
	8504113006	43	SCREW BID(+) M3X6 MACH W/DISK	FOR VIDEO PCB X8,CHAS L & BKT X2
	9010096330	44	SW INSULATOR	
S	SS67000220-404	45	POWER SWITCH & VR ASS'Y	
	8037114016	46	SCREW BIND(+) M4X16 HI-LOW	FOR TILT BALL & LATCH X2
	1009094238	47	LATCH	
	1006094251	48	RETAINER	
	1005294238	49	TILT BALL	
S	1010094310	50	FOOT	
S	1020094623	51	BASE-2	
	8081115030	52	SCREW BID(+)/HD MECH 1/4"-20X3	FOR BASE & RETAINER
S	AM67000244-V	53	NECK PCB ASS'Y	
S	AM67000544-V	54	POWER SAVING PCB ASS'Y	
	8350113016	55	SCREW BIND(+) M3X16 W/S W F.W.	FOR REAR COVER & BEZEL BKT X4
	1002096320	56	COVER REAR	
	2002094660	57	CHASSIS (R)	
	2007096330	58	VR BKT	
	2016094230	59	STUD M3X12	FOR VIDEO PCB
	5530307005	60	SUPPORT PCB CBS-8K	FOR POWER PCB
	5530310009	61	PCB SUPPORT PS-03GA	FOR STAND & PCB
	8121114008	62	SCREW CAP BID(+) M4X8 TAPPING"	FRO CHAS BTM MAIN GND
	101509433P	63	DOOR LOCK	
	2003096700	64	UPPER BKT	
	2002196700	65	STAND	
S	SS67000520-404	66	TRS. & PCB ASS'Y	
	2010096710	67	CHASSIS REAR	
S	AM67000422-V	68	DAUGHTER-1 PCB ASS'Y	
S	SS67001330-404	69	LOGIC PCB ASS'Y	

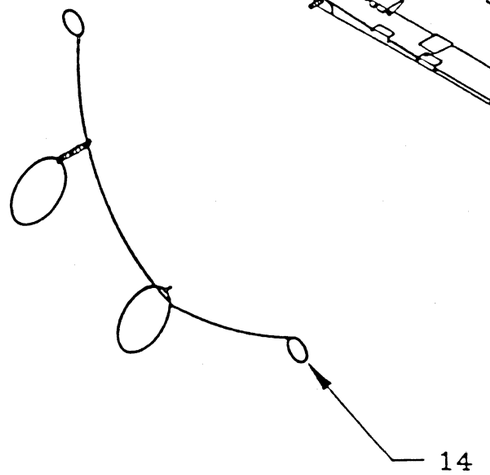
MECH EXPLODED VI

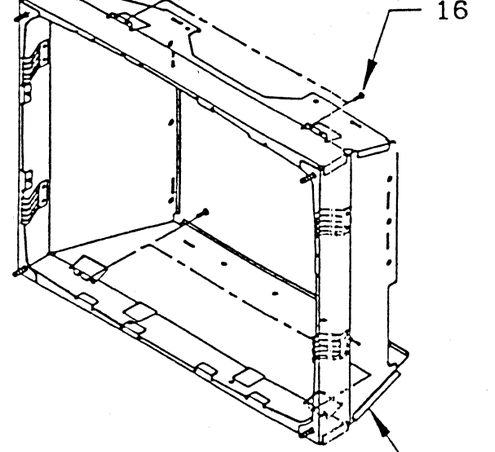


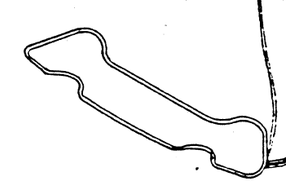
	8121114008	62	SCREW CAP BID(+) M4X8 TAPPING"	FRO CHAS BTM MAIN GND
	101509433P	63	DOOR LOCK	
	2003096700	64	UPPER BKT	
	2002196700	65	STAND	
S	SS67000520-404	66	TRS. & PCB ASS'Y	
	2010096710	67	CHASSIS REAR	
S	AM67000422-V	68	DAUGHTER-1 PCB ASS'Y	
S	SS67001330-404	69	LOGIC PCB ASS'Y	
S	SS67000230-404	70	VIDEO IC PCB ASS'Y	

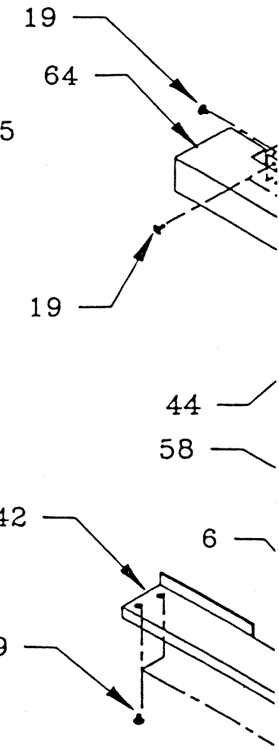




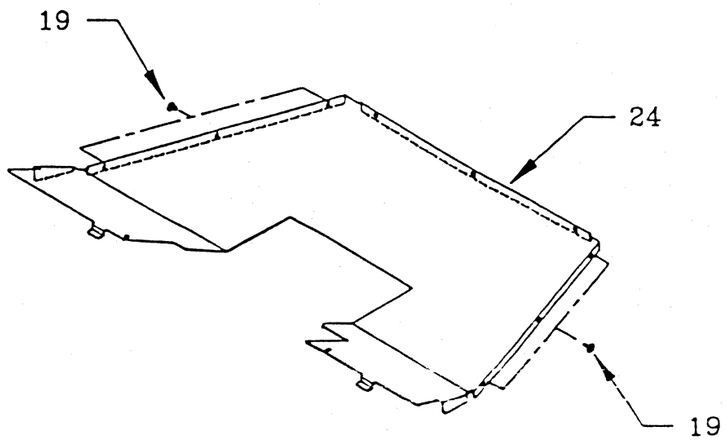








PLODED VIEW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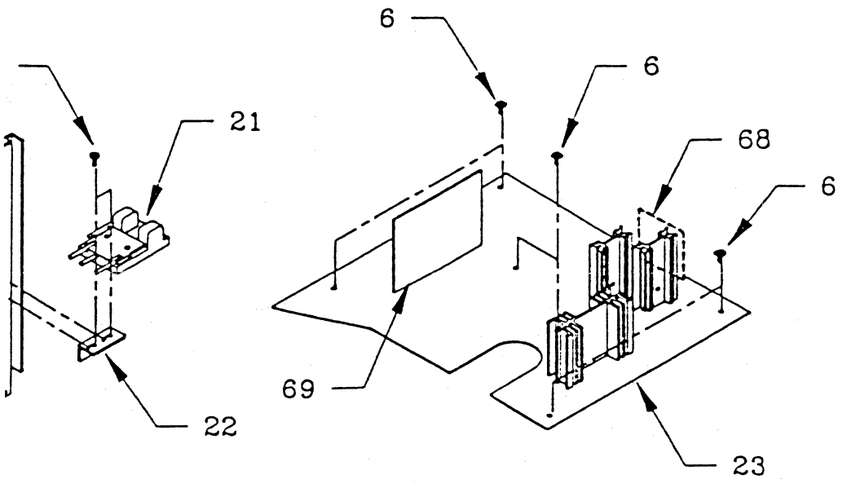
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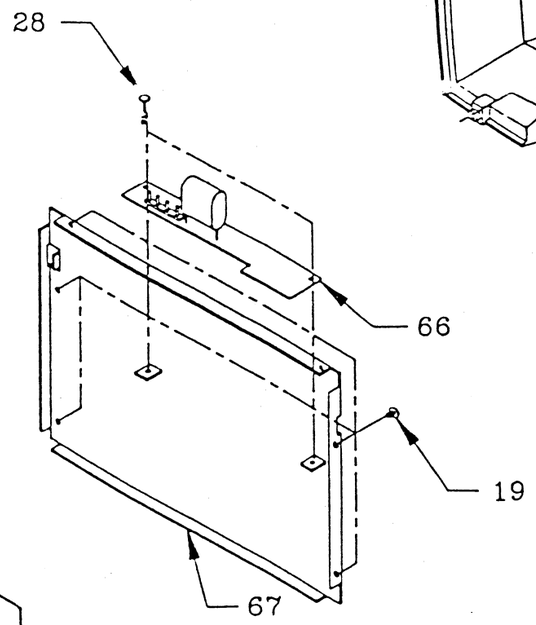
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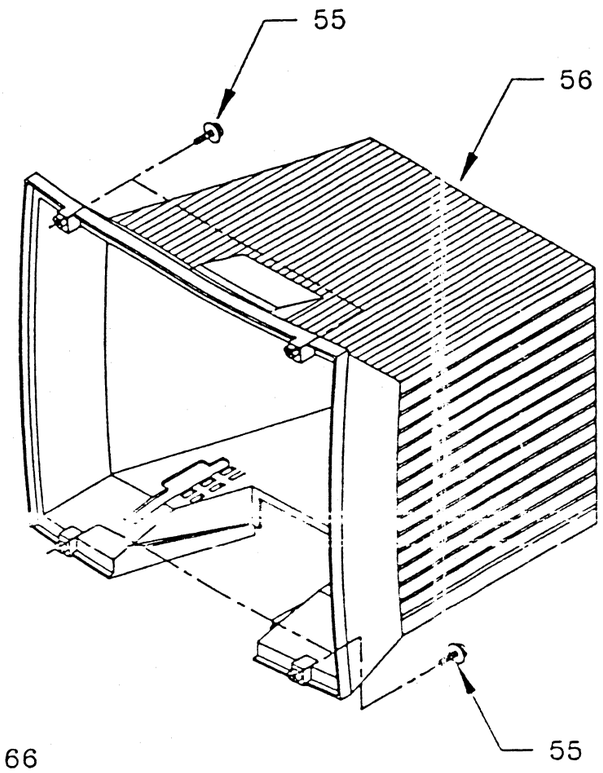
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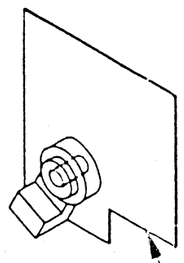
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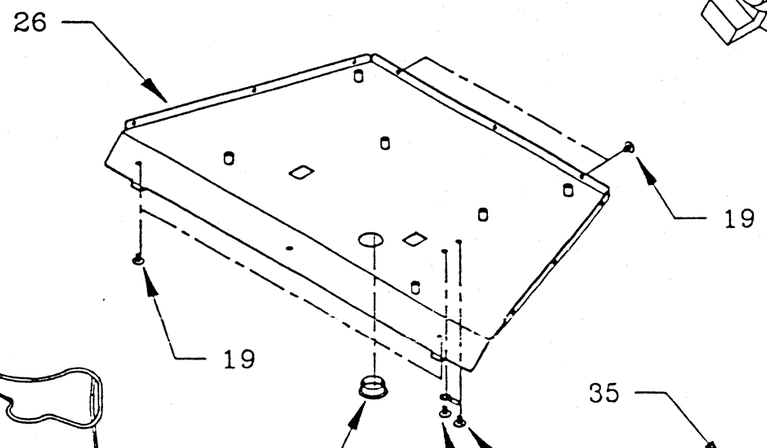
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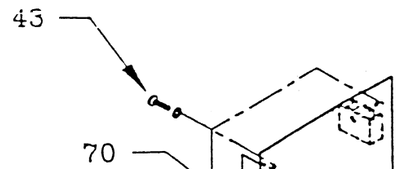
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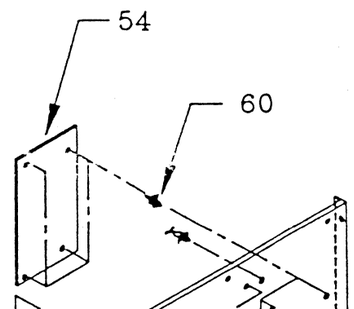
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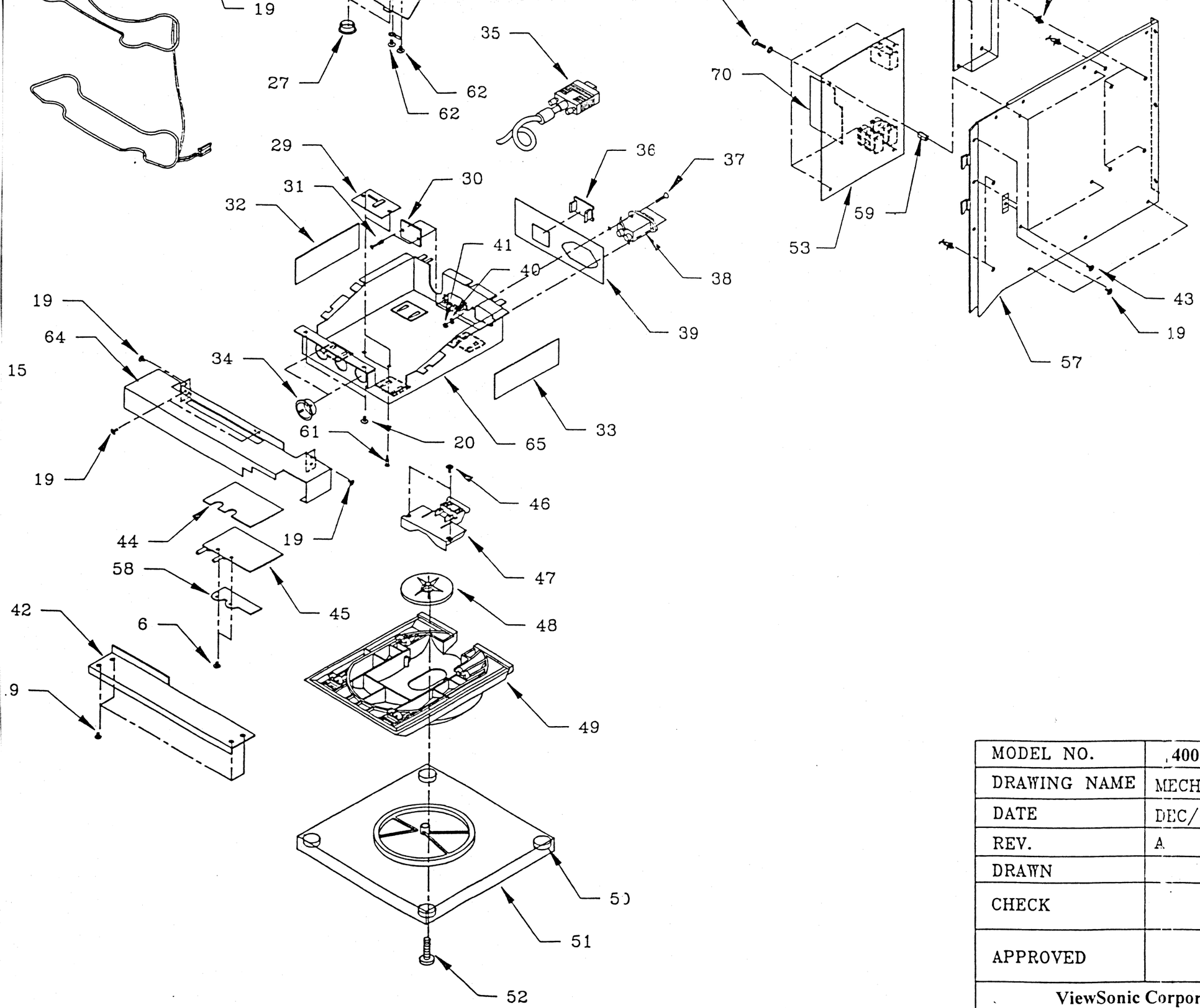

MODEL NO.	4000TC
DRAWING NAME	MECH EXPLODED VIEW
DATE	DEC/04 1993
REV.	A
DRAWN	
CHECK	12/7 93'
APPROVED	
ViewSonic Corporation	